

Kvalitativna procena pojedinaca u domu zdravlja porodične medicine: izbegavanje/odbijanje COVID-19 vakcinacije

Qualitative assessment of individuals at a family health center: avoidance/refusal of COVID-19 vaccination

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Sažetak

Uvod. Izbegavanje/odbijanje vakcina je značajan javnozdravstveni problem u COVID-19 pandemiji. Ovaj rad se fokusira na izbegavanje/odbijanje COVID-19 vakcina u ambulanti porodične medicine. Probaćemo da pronađemo i opišemo faktore koji vode izbegavanju/odbijanju kako bi izgradili nove strategije.

Metode. Ova studija je trajala od decembra 2021. do avgusta 2022. Osam pojedinaca je intervjuisano semi-strukturiranom formom. Mesto održavanja studije je Turgut Reis, ambulanta porodične medicine, Kayseri u Turskoj. Tematska analiza je korišćena za analizu kvalitativnih podataka.

Rezultati. Opređelili smo se za tri glavne i 16 podtema, pregledajući beleške. Glavne teme su bili nivo znanja o COVID-19, individualni i neindividualni faktori koji dovode do izbegavanja/odbijanja COVID-19 vakcina. Realnost bolesti, zaštitne mere, zabrinutost za sadržaj i proizvodni proces vakcina, interakcija između hroničnih bolesti i COVID-19, pozitivni ili negativni efekti religije i nacionalnog identiteta na vakcinaciju su neke od podtema. Studija je pokazala da su zabrinutost u pogledu sigurnosti vakcina, efikasnosti i proizvodnji, kao i individualne želje, uticaj medija i obavezne zakonske forme nametnute od strane zdravstvenog menadžmenta bili najuticajniji faktori za izbegavanje/odbijanje vakcina.

Zaključci. Iznenađujuća pojava COVID-19 dovela je do kasnelog odgovora od strane društva i zdravstvenih vlasti. Može se takođe povezati i sa neverovanjem u postojanje bolesti, prihvatanjem zaštitnih mera i poverenjem u opcije lečenja. Mada je savremena tehnologija dostupna, relativno ograničen broj informacija o efikasnosti vakcina i njihovom proizvodnom procesu je došao do javnosti, te je i to moglo doprineti ovakvoj reakciji.

Ključne reči: COVID-19, vakcinacija odbijanje, prevencija

Deo ove studije predstavljen je na: "VII Конференција на Асоцијацијата на лекари по општа/сејмена медицина на Југоисточна Европа (А ОМ / СМ ЈИЕ)" Охрид 2022.

Priznanja. Zahvalni smo osobama koje su radile intervjue i učestvovalle u našoj studiji.

Etičko odobrenje. Etičko odobrenje je dato od strane Etičkog komiteta Medicinskog fakulteta, Erciyes univerziteta (08.12.2021-2021/798).

Abstract

Background. The avoidance or refusal of vaccines is a significant public health problem during the COVID-19 pandemic. This article focuses on vaccine avoidance and refusal among patients at a Family Health Center (FHC). We will attempt to identify and describe the factors that contribute to avoidance and refusal so that new strategies can be developed.

Methods. This study was conducted between December 2021 and August 2022. Eight individuals were interviewed with a semi-structured form. The study site was Turgut Reis FHC Kayseri/Turkey. Thematic analysis was used to analyze the qualitative data.

Results. The study identified three main themes and 16 sub-themes based on verbatim notes. The main themes were the level of knowledge regarding COVID-19 and individual and non-individual factors causing COVID-19 vaccine avoidance/refusal. Some of the sub-themes included the reality of the disease, protective measures, concerns about the content and production process of the vaccine, the interaction between chronic disease and COVID-19, and the positive or negative effects of religion and national identity on vaccination. The study demonstrated that concerns about vaccine safety, efficacy, and production, as well as individual preferences, media influence, and mandatory regulations of health care management were the most influential factors in vaccine avoidance/refusal.

Conclusions. The sudden onset of COVID-19 resulted in a delayed response from society and health authorities. This delay may be due to distrust of the disease, reluctance to adopt preventive measures, and uncertainty about treatment options. While advanced technology exists, limited public information about the vaccine's effectiveness and production processes could be contributing to this reaction.

Key words: COVID-19, Vaccination refusal, prevention

A part of this study was presented in: "7th Conference of Association of General Practitioners/Family Medicine of Southeastern Europe" (A GP/FM SEE) " Ohrid 2022.

Acknowledgements. We are grateful to the interviewers who participated in our study.

Ethical Approval. Ethical approval was granted by the Ethics Committee of Erciyes University Faculty of Medicine (08.12.2021-2021/798).

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Uvod

Prvi slučaj COVID-19 u Turskoj potvrđen je 11. marta 2020¹. Pošto nije bilo efikasnog lečenja za ovu bolest, vakcinacija se smatrala najefikasnijom metodom zaštite.

Kako bi se usporilo širenje infekcije, ubrzo su uvedene mere lične i društvene zaštite, kao npr. izolacija pojedinaca, upotreba maski, izbegavanje bliskih kontakata, češće provetranje zatvorenih prostora i pranje ruku. Kako se pandemija širila, vakcinacija se i dalje smatrala jednom od najefikasnijih zaštitnih mera² Tabela 1.

Sinovac/CoronaVac je vakcina koja je najpre korišćena u Turskoj, i to od 13. januara 2021, kada je postala dostupna javnosti, sa odobrenjem za hitnu upotrebu³. Od 12. aprila 2021, stigla je Pfizer-BioNTech vakcina, kao još jedna vakcina za javnu upotrebu. Konačno, i prva faza studije za tursku vakcinu - TURKOVAC započeta je 22. decembra 2021^{4,5}.

Šema vakcinacije protiv COVID-19, koju je izdalo Ministarstvo zdravlja Turske, objavljena je 30. decembra 2020. Prva grupa, kojoj je odobrena vakcinacija su bili zdravstveni radnici, a za njima stariji od 90 godina i oni sa hroničnim bolestima⁶. Od tada, BIONTECH, TURKOVAC i SINOVAK su korišćeni za COVID-19 vakcinaciju i trenutno su u upotrebi. Determinante nepristajanja na vakcinu su sledeće: nemanje dovoljno informacija, ograničen pristup informacijama iz literature⁷. Nepoznata efikasnost i verovatni neželjeni efekti vakcine smatrani su najznačajnijim faktorima za izbegavanje/odbijanje⁸.

Vakcine protiv COVID-19 zasnovane na mRNK razvijene su primenom relativno nove tehnologije, a zbog nedostatka informacija o potencijalnim nepoznatim štetnim efektima, došlo je do neočekivane stope izbegavanja i odbijanja vakcinacije protiv COVID-19⁹. Poverenje u međunarodne institucije, organizacije i zemlje koje koriste ovu novu tehnologiju značajno varira među pojedincima¹⁰. Pojedinačne reakcije na vakcinu protiv COVID-19 dešavale su se brzo u poređenju sa konvencionalnim vakcinama¹¹.

Neki su smatrali da je odobravanje vakcina protiv COVID-19 za hitnu upotrebu, za tako kratko vreme, bio uspeh. Nepoverenje u vakcine sprečilo je masovnu vakcinaciju stanovništva i to je verovatno razlog niskog titra antitela.

Cilj ovog istraživanja je bio: ispitivanje doprinosećih faktora koji se odnose na nivo znanja, stavove i ponašanje odraslih osoba koje odbijaju ili izbegavaju vakcinaciju protiv COVID-19.

Introduction

In Turkey, the first COVID-19 case was reported on 11th March 2020¹. As there is no effective treatment for this disease, vaccination is considered one of the most effective methods of protection. Therefore, isolation and vaccination are still considered the best treatment options.

To combat the spread of infection, measures such as individual isolation, wearing masks, avoiding close personal contact, ventilating closed areas, and proper hand hygiene were quickly introduced. Vaccination was also considered one of the most effective preventive measures during the pandemic².

The initial vaccine used in Turkey was Sinovac/CoronaVac, which was introduced for public use on 13th January 2021 after receiving approval for emergency use³. On 12th April 2021, the Pfizer-BioNTech vaccine was introduced as the second vaccine for public use. Finally, the Phase I study for the Turkish vaccine TURKOVAC began on 22nd December 2021^{4,5}.

The COVID-19 vaccination program by the Ministry of Health (MoH) in Turkey was officially announced on December 30, 2020. The initial groups eligible for vaccination were healthcare workers, followed by individuals aged 90 and over with chronic illnesses⁶. BIONTECH, TURKOVAC, and SINOVAK vaccines were used for COVID-19 vaccinations. Factors contributing to vaccine noncompliance include insufficient information and limited access to relevant literature⁷. Concerns about vaccine efficacy and potential adverse effects were cited as the main reasons for vaccine avoidance or refusal⁸.

The mRNA-based COVID-19 vaccines were developed using a relatively new technology, and due to the lack of information about potential unknown adverse effects, there has been an unexpected rate of COVID-19 vaccination avoidance and refusal⁹. The trust in international institutions, organizations, and countries using this new technology varies significantly among individuals¹⁰. Individual reactions to the COVID-19 vaccine have quickly emerged compared to conventional vaccines¹¹.

Some people considered the rapid approval of COVID-19 vaccines for emergency use a success. However, vaccine distrust has prevented widespread vaccination, possibly contributing to low antibody levels.

The aim of this research was: to examine the contributing factors that determine the level of knowledge, attitudes and behaviors of the adults who refuse or avoid the COVID-19 vaccination.

Metode

Kontekst studije

Ova studija je sprovedena u Kajzeriju, od 18. decembra 2021. do 5. avgusta 2022. Kajzeri je značajna metropola i predstavlja centralnu anatolijsku regiju Turske. Mrtva vakcina, po imenu TURKOVAC je proizvedena, a kliničke studije su sprovedene na Univerzitetu Erčijes u Kajzeriju.

Demografija zaposlenih u mestu gde je studija sprovedena (Dom zdravlja Turgut Reis - DZTR) karakteristiše se radnicima i službenicima koji su došli iz ruralnih područja Kajzerija i Turske. Ljudi iz ovih područja su međusobno vrlo bliski i imaju takoreći zatvorenu zajednicu.

Dizajn studije

U ovu interpretativnu, kvalitativnu studiju planirali smo da uključimo sve one koji su izbegli/odbili COVID-19 vakcinu u Domu zdravlja Turgut Reis. Informacije o oklevanju ili odbijanju su dobijene iz zdravstvene dokumentacije DZTR. Oni koji nisu primili COVID-19 vakcinu do početka ove studije su uključeni.

Studiju je odobrio Etički komitet Medicinskog fakulteta Erčijes univerziteta. Osobe uključene u studiju, koje nisu primile vakcinu protiv COVID-19, su pozvane na intervju, licem u lice, koji bi se održali tokom njihove posete domu zdravlja iz bilo kog razloga. Preliminarni intervju je urađen sa svakim pojedinačno i zakazan je intervju za sve one koji su prihvatili učešće. Tokom intervjuja koji je usledio, napravljen je audio zapis i obezbeđen je pismeni pristanak.

Svi intervjui su urađeni pod supervizijom jednog istraživača (porodični lekar), a sa dva istraživača u jednom slučaju (stažista). Osim audio zapisa, onaj koji radi intervju je pisao i beleške gde je zapisivao svoje utiske. Posle intervjuja, audio snimci su zapisani od reči do reči i onda prevedeni u tekst na turskom. Ovi tekstovi su pojedinačno pregledani i informacije koje su dobijene od svakog učesnika grupisane su u teme koje su proizašle iz sakupljenih podataka^{12,13,14,15}.

Karakteristike istraživača su sledeće: doktor medicine sa iskustvom u kliničkim istraživanjima, uključujući i istraživanja o vakcinama, porodični lekar sa interesovanjem za kvalitativno istraživanje, društveni antropolog sa iskustvom u etnografskom istraživanju i jedan stažista su bili deo istraživačkog tima. Pitanja iz intervjuja napisali su sami istraživači sa ciljem da otkriju osnovne faktore koji se odnose na nivo znanja, stavove i ponašanje onih koji izbegavaju/odbijaju vakcinu za COVID-19. Teme iz ovih pitanja su bile u vezi sa COVID-19: zdravstvene posledice, preventivne metode, perspektiva intervjuisane osobe u vezi metoda lečenja, efekti bolesti na bliske lične kontakte intervjuisane osobe i kako su shvatili opštu zdravstvenu politiku (Tabela 1).

Methods

Study Context

The study took place in Kayseri from December 18, 2021, to August 5, 2022. Kayseri is a major metropolitan city representing the Central Anatolian region of Turkey. The inactive vaccine, TURKOVAC, was developed and clinically tested at Erciyes University in Kayseri.

The study is conducted at the Turgut Reis Family Health Center (TRFHC), which serves a demographic consisting of workers and civil servants who have migrated from rural areas in Kayseri and Turkey. The people in this neighborhood have close relationships with each other and the community has a more closed structure.

Study Design

In this interpretative qualitative study, we aimed to include individuals from TRFHC who have refused the COVID-19 vaccine. Information regarding vaccine hesitancy or refusal was obtained from the records of TRFHC. We identified those who had not received the COVID-19 vaccination up to the start of this study.

The study received approval from the Erciyes University Faculty of Medicine Ethics Committee. Individuals who were not vaccinated against COVID-19 and were part of the study were personally invited to participate during their visit to the family health center for some other reason. Each person underwent an initial interview, and those who agreed to participate were given appointments. Subsequently, face-to-face audio recordings were conducted during their appointments, and written consent was obtained.

All interviews were conducted under the supervision of a single researcher (family physician) with two interviewers present. The interviewer took notes of their observations in addition to making audio recordings. The interview audio recordings were transcribed verbatim and converted into plain text in Turkish. Each text was then reviewed individually, and the information obtained from each participant was grouped under the themes extracted from the collected data^{12,13,14,15}.

The characteristics of the researchers are as follows: a medical doctor experienced in clinical trials, including vaccine trials; a family physician interested in qualitative research; a social anthropologist experienced in ethnographic research; and an intern who participated in clinical and qualitative trials with this research team. The researchers developed interview questions to uncover the basic factors that determine the level of knowledge, attitudes, and behaviors of those who avoid or refuse the COVID-19 vaccine. The themes of the questions were related to COVID-19 and included health consequences, preventive methods, interviewees' perspectives on treatment methods, the effects of the disease on the interviewees' close personal contacts, and how the general health policy was interpreted by the interviewees (see Table 1).

Table 1. Question list

	Questions
1	What do you think about the COVID-19 disease? <ul style="list-style-type: none"> • How it is transmitted • In whom it is more common • Which organ harms the most • How does it affect the body ?
2	What is your consideration to avoid from COVID-19?
3	What kind of relationships might be between COVID-19 and other diseases?
4	What do you think about the treatments for COVID-19 disease?
5	What do you consider for those who have experienced COVID-19 in your environment?
6	What do you think about the general health policy of Türkiye?
7	What do you think about the child and adult vaccines used in Türkiye?
8	What do you think about the COVID-19 vaccines produced in Türkiye?
9	What do you think about COVID-19 vaccines produced in other countries?
10	What do you think about COVID-19 vaccines produced in China, Germany, UK, and USA?
11	Could you explain your considerations about from which elements and how these vaccines were produced?
12	Do you find it objectionable to get vaccinated from a religious point of view? (What do you think about Islam's point of view towards vaccines?)
13	What can you say about the side effects that may occur after COVID-19 vaccination?
14	What could be the social effects of not vaccinating for COVID-19?
15	What could be the individual effects of not vaccinating for COVID-19?
16	What kind of interactions were you received from your personal contacts for COVID-19 vaccine?
17	What do you think about COVID-19 vaccines from Türkiye and abroad?
18	What are your main considerations for vaccine avoidance/refusal for COVID-19? (Individual, Social etc.)
19	What are your concerns for COVID-19 vaccination?

Analiza

Tematska analiza je korišćena u analizi kvalitativnih podataka i razvijanju tema. To je deskriptivna strategija redukcije podataka segmentiranjem, kategorizacijom i sumiranjem intervjua po konceptu važnosti¹⁴. Teme su određene razmatranjem sakupljenih podataka.

Koristili smo zabeleške da bi razvili teme. Opservacijske zabeleške tokom intervjua su takođe pretočene u beleške i uključene su u teme. Ove teme su dalje detaljnije objašnjene kroz podteme.

Rezultati

U sklopu ovog istraživanja, osam učesnika je intervjui-sano licem u lice i individualno u DZTR. Četvoro odabranih učesnika je odbilo da učestvuje bez davanja bilo kakvog objašnjenja. Intervjui su trajali približno 20–30 minuta. Svim ispitanicima je potvrđeno da će prikupljeni podaci biti

Analysis

Thematic analysis was employed to analyze the qualitative dataset and identify the themes. It is a method of data reduction, which involves segmenting, categorizing, and summarizing the interviews based on important concepts¹⁴. The themes are determined based on the considerations in the collected data.

Verbatim notes were used to develop the themes, and observations made during the interviews were converted into field notes and included in the themes. These themes were then further elaborated with sub-themes.

Results

As part of the research, eight participants were individually interviewed face-to-face at the TRFHC. However, four other potential participants rejected participation without providing an explanation. The interviews lasted approximately 20–30 minutes each. All participants were assured that their data would be used anonymously. The results obtained from

anonimno korišćeni. Rezultati dobijeni iz tematske analize (Tabela 2) su interpretirani poređenjem sa sličnim studijama.

the thematic analysis (Table 2) were interpreted by comparing them with findings from similar studies.

Table 2. The determined themes and sub-themes about COVID-19 vaccine avoidance/refusal

Level of Knowledge Regarding COVID-19	Individual Factors Cause COVID-19 Vaccine avoidance/refusal	Non-Individual Factors Lead to COVID-19 Vaccine avoidance/refusal
The occurrence and spread of the infection, its indications, and symptoms	Specific concerns to non-COVID-19 vaccines	The effects of the disease process on economic and social life
Protective measures	Concerns about the content and production process of the COVID-19 vaccines	General and specific political approaches to general health during the pandemic period
Information about those who experienced COVID-19	Concerns about the impact of not vaccinated for COVID-19	Concerns about the mechanism of action and types of vaccine
The reality of the COVID-19 disease		Adverse effects of vaccines
Sources of information about the disease process		Interaction between chronic diseases and COVID-19
Concerns specific to the medicine used in treatment		Positive or negative effects of religion and national identity on vaccination
		The eradication of COVID-19

Demografske informacije o osam učesnika su prikazane u tabeli 3.

The demographic information of the eight participants is provided in Table 3.

Table 3. The demographic characteristics of the participants

Tabela 3. Demografske karakteristike učesnika

Code of the participant / Kod učesnika	Gender / Pol	Year of Birth / Godina rođenja	Educational Status / Obrazovni status	Working Status / Radni status	Marital Status / Bračni status	District / Oblast	COVID-19 Vaccine avoidance/refusal / Izbegavanja/odbijanje COVID-19 vakcine
E01	F / Ž	1990	High School / Srednja škola	Paper mill worker / Radnica u štampariji	Married / Udata	Kayseri Kocasinan	N / NE
E02	F / Ž	1981	College / Fakultet	Nurse / Medicinska sestra	Married / Udata	Kayseri Kocasinan	N / NE
E03	M / M	1987	College / Fakultet	Surgical Nurse / Hirurški tehničar	Married / Oženjen	Kayseri Kocasinan	N / NE
E04	M / M	1963	Technical High School / Tehnička viša škola	Retired worker / Penzionisani radnik	Married / Oženjen	Kayseri Kocasinan	N / NE
E05	M / M	1983	College / Fakultet	Administrative personnel / Administrativni radnik	Widow / Udovac	Kayseri Kocasinan	N / NE
E06	F / Ž	1978	College / Fakultet	Cleaning Worker / Spremačica	Married / Udata	Kayseri Kocasinan	N / NE
E07	F / Ž	1936	neškološana	Housewife / Domaćica	Widow / Udovica	Kayseri Kocasinan	O / Neopredeljen
E08	M / M	1985	College / Fakultet	Radiology Technician / Radiološki tehničar	Married / Oženjen	Kayseri Kocasinan	N / NE

Y = Yes N = No O = Oblie
D = Da, NE = Ne, O = Neopredeljen

Bilo je četiri muškarca i četiri žene. Identiteti učesnika su bili anonimni i kodirani. Ni jedan od učesnika nema hronične bolesti. Jedan od učesnika (E04) primio je vakcinu protiv COVID-19 zbog društvenih restrikcija, a drugi (E06) jer je njen suprug zdravstveni radnik. Svi drugi učesnici nisu bili vakcinisani kada je naša studija završena. Učesnik, koji nije vakcinisan, takođe je rekao da je protiv vakcinacije i odraslih i dece (E05).

Znanje učesnika o COVID-19

Svi učesnici su potvrdili da je put prenošenja infekcije vazdušni i direktnim kontaktom. Uz to, smatraju da se može preneti putem hrane i pića, a neki i da studenti i zaposleni šire infekciju jer su aktivni u dnevnim aktivnostima (E02). Slično tome, za vreme pandemije, SZO (Svetska zdravstvena organizacija) i Ministarstvo zdravlja su objavili da deca mogu biti značajan izvor prenošenja COVID-19, naročito u zatvorenim prostorima^{16,17}.

Simptomi i znaci bolesti mogu biti različiti, kod različitih ljudi, a kod starijih se očekuje da imaju ozbiljniju kliničku sliku (E05, E06). Učesnici su tvrdili da bolest uglavnom pogađa pluća i izaziva respiratorne probleme (E04, E05, E06, E08); povišena temperatura, slabost, bolovi u glavi, zglobovima i leđima (E01, E03, E04, E06, E08); gubitak apetita, gubitak čula ukusa i mirisa (E05, E07, E08); koagulacija krvi (E03, E05). Ovo su bili najčešće pomenuti znaci i simptomi COVID-19 infekcije¹⁸.

Svi pacijenti su rekli da imunitet može da se ojača “čistoćom/higijenskim merama” i “balansiranom / redovnom ishranom” u cilju sprečavanja bolesti. Međutim, postojala je nesuglasica o upotrebi maski u cilju sprečavanja bolesti. Neki od učesnika su smatrali da maske ne štite i da čak i maskirani ljudi mogu da se zaraze COVID-19 (E03, E05, E06, E08). Uz to, upotreba maski može da spreči izbacivanje COVID-19 virusa iz tela (E03).

Svi učesnici smatraju da socijalni kontakti imaju značajnu ulogu u razvoju pandemije. Jedan od učesnika, koji je zdravstveni radnik, smatra da se pandemija nije završila jer nisu svi vakcinisani, iako ni on sam nije još uvek vakcinisan (E02).

Neki od naših učesnika su videli COVID-19 infekciju kod ljudi iz njihovog okruženja (E01, E03, E05). Drugi su imali evidentne COVID-19 simptome kao povišenu temperaturu, slabost, respiratorne probleme (E01, E03, E08). Uz učesnike čiji su rođaci bili hospitalizovani u jedinicama intenzivne nege, bilo je i onih čiji su rođaci umrli zbog COVID-19 (E02, E04, E08). Učesnik koji nema poverenja u zvaničnu medicinu sprečio je njegovu porodicu da koristi anti-COVID lekove i pokušao je da poboljša njihov imunitet hranljivim suplementima (E05). Drugi učesnik veruje da genetski faktori mogu imati značajnu ulogu u prenošenju i oporavku od COVID-19 s obzirom da infekcija ima individualne karakteristike (E06).

There were four male and four female participants. Participant identities were anonymized and coded. None of the participants have a chronic disease. One of the participants (E04) received the COVID-19 vaccine due to social restrictions, and another participant (E06) received the COVID-19 vaccine because her husband was a healthcare worker. All other participants did not receive the vaccine by the end of our study. One participant who did not receive the vaccine also expressed opposition to adult and child vaccinations (E05).

Participants' understanding of COVID-19

Participants confirmed that COVID-19 can be spread through airborne transmission and direct contact. Additionally, they mentioned that it can also be transmitted through food and drinks. Some participants suggested that students and employees might be the cause of contamination due to their active daily lives (E02). WHO and MoH announced during the pandemic that children may be a significant source of COVID-19 transmission, especially indoors^{16,17}.

The signs and symptoms of the disease may vary from person to person, and older adults are likely to be affected more severely (E05, E06). According to participants, the disease mainly affects the lungs and causes respiratory problems (E04, E05, E06, E08). Other reported symptoms include fever, weakness, headache, joint and back pain (E01, E03, E04, E06, E08), loss of appetite, loss of taste and smell (E05, E07, E08), and blood coagulation (E03, E05). These were the most frequently reported signs and symptoms of COVID-19 infection¹⁸.

All participants agreed that immunity can be strengthened through “cleanliness/hygiene measures” and “balanced/regular nutrition” to prevent disease. However, there was a disagreement about the use of masks for preventing the disease. Some participants believed that masks do not offer protection, stating that even masked people may still become contaminated with COVID-19 (E03, E05, E06, E08). On the other hand, one participant mentioned that the use of face masks may prevent the spread of the COVID-19 virus from the body (E03).

All participants believe that social interaction plays a significant role in the development of the pandemic. A health worker participant stated that the pandemic did not end because not everyone was vaccinated, even though he has not been vaccinated himself (E02).

In their location, some participants had mild COVID-19 infections without receiving any medication (E01, E03, E05). Others experienced apparent COVID-19 symptoms such as fever, weakness, and respiratory problems (E01, E03, E08). Additionally, some participants had relatives who were hospitalized in intensive care units, while others lost relatives due to COVID-19 (E02, E04, E08). One participant,

Neki od učesnika tvrde da je COVID-19 politički zloupotrebljena od strane Kine, koja je na ovaj način želela da osnaži sopstvenu ekonomiju (E01). Drugi učesnik tvrdi da je razlog za pojavu virusa bio smanjenje svetske populacije, tako da smrt ljudi sa hroničnim bolestima, invalida i starijih smanji “državni teret” (E03). Svi učesnici su pratili kurs pandemije kroz medije, kao što su npr. internet i televizija. Jedan od učesnika tvrdi da virus ne može da se definiše, ali i mediji preteruju sa postojanjem i efektima virusa. Neki od učesnika ne veruju u postojanje bolesti.

“Ako mi neko pokaže pod elektronskim ili digitalnim mikroskopom da je to virus, poljubicu ga u čelo.” (E05)

Neki od učesnika kažu da ne veruju u efekte lekova koji se koriste u lečenju COVID-19 i zabrinuti su zbog neželjenih efekata koje oni mogu proizvesti. Urok ovog nepoverenja može biti u broju datih tableta prvog dana lečenja (Favipiravir 2x8 tableta prvog dana, 2x2 tablete naredna 4 dana)¹⁶. Za razliku od ovih učesnika, neki drugi tvrde da ne žele da koriste ove lekove, jer im je “istekao rok” (nekim antivirusicima koji su korišćeni u lečenju COVID-19 je produžen rok, indikujući na taj način da njihov efekat još uvek postoji, E02). Drugi je pomenuo da su ovi lekovi korišćeni u našoj zemlji, ali ne u svetu (E04). Dva učesnika su tvrdila da su ljudi koji su koristili ove lekove imali srčane probleme i da su čak bili hospitalizovani u jedinici intenzivne nege (E03, E05). Samo jedan učesnik je rekao da ga je ovaj lek potpuno izlečio (E07).

Individualni faktori za izbegavanje/odbijanje vakcina

Jedan od učesnika je tvrdio da je protivnik vakcinacije i za decu i za odrasle, a drugi da je protivnik vakcinacije samo za odrasle (E05, E06). Svi drugi učesnici smatraju da su konvencionalne vakcine za decu i odrasle pouzdane, jer su proizvod dugoročnog ispitivanja (E01, E02, E03, E04, E07, E08, E09).

Osim učesnika E07, svi drugi ne veruju u brzu proizvodnju vakcina protiv COVID-19 jer nema dovoljno informacija o ovom procesu i sadržaju vakcine. Skoro svi učesnici ne veruju u COVID-19 vakcine zbog njihovih neželjenih efekata: moždano krvarenje, srčani udar, infertilitet itd., a i nedostatka kompletne zaštite od COVID-19.

Ljudi su smatrali da COVID-19 vakcinaciju treba sprovesti po ličnim željama, a ne po obaveznom programu vakcinacije. Neki učesnici smatraju da su osobe koje nisu želele da se vakcinišu bile izolovane od dnevnih društvenih aktivnosti, kao sprečavanje ulaska u javni prevoz i šoping centre. Osim ovoga, jedan učesnik je tvrdio da će vakcinisane osobe i njihovi rođaci biti nezdraviji nego nevakcinisane osobe (E05). Drugi učesnik je tvrdio da pošto će svi biti inficirani COVID-19 tokom vremena, vakcinacija neće ni biti potrebna (E08).

Međutim, učesnici su kontradiktorni u vezi toga da li se vakcinisati ili ne. Jedan učesnik tvrdi da interval između

who distrusts contemporary medicine, prevented his family from using anti-COVID drugs and tried to boost their immunity with nutritional supplements (E05). Another participant believes that genetic factors may play a significant role in the transmission and recovery from COVID-19, considering that the infection has individual characteristics (E06).

Some participants claimed that COVID-19 is a political intervention directed by China to strengthen its economy (E01). Another participant claimed that the virus appeared to decrease the increasing world population, reducing the burden of the states by causing the death of people with chronic conditions, disabilities, and the elderly, “state’s burden” (E03). All participants received information about the pandemic from the media, such as the internet and television. One participant stated that the virus cannot be defined but media exaggerate its existence and effects. Some participants tend to not believe in the disease.

“If someone were to show me the virus under an electron microscope or a digital microscope, I would kiss him on the forehead.” (E05)

Some participants expressed distrust in the effectiveness of the drugs used to treat COVID-19 and were anxious about potential adverse effects. This distrust may be due to the high dosage administered on the first day of treatment (Favipiravir 2x8 tablets on the first day, 2x2 tablets for the following 4 days). Other participants mentioned that they did not want to take these drugs because they believed they were “out of date,” even though updated antivirals were being used to treat COVID-19 (E02). Additionally, one noted that these drugs were no longer used globally, despite still being used in the country (E04). Two participants claimed that individuals who took this drug experienced heart problems and were even hospitalized in intensive care (E03, E05). Only one participant reported being completely cured by this drug (E07).

Individual Factors for Vaccine Avoidance/Refusal

One of the participants mentioned that he opposed both childhood and adult vaccination, while another was only against adult vaccines (E05, E06). All the other participants believe that conventional childhood and adult vaccines are reliable because they are the result of extensive research processes (E01, E02, E03, E04, E07, E08, E09).

Except for participant E07, none of the others trust the quick production process of the COVID-19 vaccines because there isn’t enough information about the process and the vaccine’s contents. Almost all of the participants do not trust the COVID-19 vaccines due to concerns about their adverse effects, such as brain hemorrhage, heart attack, infertility, and the vaccines’ incomplete prevention of COVID-19.

There are people who believe that COVID-19 vaccination should be a matter of personal choice rather than being mandatory. Some individuals are concerned that unvaccinat-

vakcina treba skratiti, mada je sama bila protiv vakcinacije (E02). Druga učesnica tvrdi da je “kineska vakcina” bila sigurna, mada smatra da strane vakcine nisu od poverenja (E07). Za razliku od prethodnih učesnika, jedan je tvrdio da “kineske vakcine” ne mogu biti sigurne jer je Kina bila izvor infekcije, a bio je ambivalentan između nemačke i turske vakcine, te se zato još nije vakcinisao (E01).

Na kraju, učesnik koji je smatrao da su strane vakcine proizvedene da unište Turke, više je voleo “kinesku vakcinu” od “nemačke vakcine” jer nema neželjenih efekata. Preferirao je “kinesku vakcinu” jer nije primetio bilo kakve neželjene efekte kod njegove snahe koja je vakcinisana “kineskom vakcinom” (E07). Stav drugog učesnika je bio da veruje “turskoj vakcini” nešto više nego “kineskoj vakcini” ili “nemačkoj vakcini” (E01). Izgleda da učesnici najviše veruju “kineskoj vakcini”. Učesnici su imenovali COVID-19 vakcine po nacionalnim kategorijama pre nego njihovim tipovima.

Neindividualni faktori povezani sa izbegavanjem/odbijanjem COVID-19 vakcina

Učesnici su tvrdili da je postojao pritisak svetskih vlada za vakcinaciju, što je uključivalo i negativnu diskriminaciju za one koji nisu vakcinisani (E01, E02, E05, E06, E08). Oni tvrde da su produžene sankcije i pritisci od strane vlada primorali ljude koji odbijaju/izbegavaju vakcinaciju da se vakcinišu.

Za razliku od drugih, neki učesnici smatraju da su redovne informacije koje je davao Naučni komitet Ministarstva zdravlja za COVID-19 i vakcinaciju bio ograničen i kontradiktoran sa njihovim prethodnim izjavama tokom pandemije. Ova činjenica je uništila njihovo poverenje u vakcine (E04). Jedan učesnik je smatrao da Ministarstvo zdravlja nije bilo nezavisno od objava SZO i Ministarstvo zdravlja nije razvilo sopstvene odluke za lečenje i vakcinaciju (E05). Takođe je kritikovao kasno odobrenje za upotrebu “domaće vakcine” (E08).

Kao što je ranije pomenuto, neki učesnici su tvrdili da, pošto zdravstvene vlasti nisu davale adekvatna objašnjenja, tačan mehanizam delovanja vakcina nije bio poznat javnosti. U skladu sa ovim, jedan od učesnika je rekao da se “virus unosi u telo u živom obliku preko mRNA vakcina” i “inaktivisane vakcine su sadržale oslabljene viruse” (E05). Neki od učesnika su smatrali da su mRNA vakcine bile štetnije nego inaktivisane, jer su reagovale sa humanom RNK (E01, E04, E05).

Bazirano na onome što oni misle i informacijama koje dobijaju od njima bliskih ljudi, učesnici su tvrdili da vakcine mogu da dovedu do formiranja tromba i tako izazovu oštećenje srca, pluća, mozga i bubrega. Dvoje je čak verovalo da vakcinacija može dovesti do srčanog udara i aktivacije karcinoma pluća, koji je prethodno bio pod kontrolom (E03, E04). Uz to, nekolicina učesnika je rekla da je imala povišenu

ed people might face restrictions such as being unable to use public transport or enter shopping malls. Additionally, one participant suggested that vaccinated people and their relatives might actually be less healthy than those who are not vaccinated (E05). Another participant argued that since everyone will eventually get infected with COVID-19, vaccination is unnecessary (E08).

Some participants expressed conflicting views about vaccination. For instance, one participant who was against vaccination suggested that vaccine dose intervals should be shortened (E02). Another participant believed that the “Chinese vaccine” was safe, while expressing skepticism about foreign vaccines (E07). Meanwhile, a different participant doubted the safety of the “Chinese vaccine” due to the source of the infection being China. This participant was undecided between German and Turkish vaccines and had not yet been vaccinated (E01).

Some participants expressed trust in the “Chinese vaccine” over the “German vaccine” because they believed that foreign vaccines were designed to harm Turks. For example, one participant chose the “Chinese vaccine” for themselves after seeing no adverse effects in their daughter-in-law who had received it (E07). Another participant leaned towards the “Turkish vaccine” more than the “Chinese vaccine” or “German vaccine” (E01). Overall, it seems that participants generally trust in the “Chinese vaccine.” Additionally, participants referred to COVID-19 vaccines using national categories rather than their specific types.

Non-Individual Factors related to COVID-19 Vaccine Avoidance/Refusal

Participants stated that there were pressures from governments around the world to get vaccinated, including negative discrimination against those who choose not to get vaccinated (E01, E02, E05, E06, E08). They claim that extended sanctions and pressures by governments forced people who refuse or avoid vaccination to get vaccinated.

Some participants feel that the information provided by the scientific committee of the Ministry of Health regarding COVID-19 and vaccination is limited and contradicts their previous statements during the pandemic. This has led to a decrease in their confidence in the vaccine (E04). One participant believes that the Ministry of Health depends too much on the announcements of the World Health Organization and does not make its own decisions regarding treatment and vaccination (E05). They also criticized the delayed approval for the use of the “domestic vaccine” (E08).

As mentioned earlier, some participants claimed that because the health authorities did not provide adequate explanations, the exact mechanism of action of the vaccines was not known to the public. One of the participants stated that “the virus is given to the body in a live form in mRNA

temperaturu posle vakcine, bol i otok na ruci, slabost i bol u zglobovima (Quote 24). Mišljenje da je bolest proizvedena kako bi se naškodilo ljudima dovela je do mišljenja da se i vakcine mogu koristiti za slične svrhe (Quote 25).

Osim jednog učesnika, koji nije imao religijska ubeđenja i nije verovao u COVID-19 vakcine, svi drugi učesnici, muslimani, su smatrali da islamska vera ne predstavlja prepreku za vakcinaciju. U ovom kontekstu, jedan od učesnika je tvrdio da odluka o vakcinaciji treba da bude lični čin slobodne volje. Međutim, u islamskoj veri Allah naređuje da se ispita bilo koja primena pre intervencije (E05) (Appendix).

vaccines” and “inactivated vaccines consist of weakened viruses” (E05). Some participants were concerned that mRNA vaccines could be more harmful than inactivated vaccines because they interacted with human RNA (E01, E04, E05).

Participants stated that based on information from their close contacts, they believed that vaccines could potentially lead to the formation of blood clots, causing harm to the heart, lungs, brain, and kidneys. Two participants even thought that vaccination could lead to heart attacks and activate lung cancer that had previously been under control (E03, E04). Several participants also reported experiencing post-vaccination symptoms such as fever, pain and swelling in the arm, and weakness and joint pain (Quote 24). Some expressed the belief that just as the disease was created to harm people, the vaccine may also be used for similar purposes (Quote 25).

The majority of the Muslim participants believe that Islamic faith does not pose any obstacles to vaccination, except for one participant who did not have any religious belief and did not trust in the COVID-19 vaccine. In this context, one of the participants mentioned that the decision to get vaccinated should be based on one’s free will. However, in Islamic faith, it is believed that Allah commands individuals to thoroughly investigate any medical intervention before proceeding with it (E05) (Appendix).

APPENDIX. Themes and sub-themes quotations numbers and quotations/Teme i podteme brojevi citata i citati

Themes and sub-themes	Quotation numbers	Quotations
THEME-1 LEVEL OF KNOWLEDGE ABOUT COVID 19		
	E08-9	“ so now, you know, it was thought that came from the team that went to Turkey for the first hajj umrah, you know, it was thought that they spread it .. 2019 september month.”
OCCURRENCE of INFECTION, DISPOSITION, SYMPTOMS AND FINDINGS	E01-10	“ In other words, we are just trying to protect ourselves right now, these mask incidents and such, we are just trying to protect ourselves a little bit, (...) I think it can be transmitted in any place, that is, it can be transmitted through water, air, food we eat.”
	E02-10	“I observed that it is mostly seen in the middle age group and young people. Because they have to work. For them, life goes on. However, it appears in the young population, but since it does not cause symptoms very quickly, they can infect very quickly. Someone next to you is vaccinated, you are not vaccinated. He acts so freely, but that person can still spread COVID.”
	E04-10	“ Let me tell you frankly, that it is transmitted only through close contact and breathing, which we hear from the media.”
	E06-10	“ It can be transmitted in any form and from anywhere. I mean, with the eyes, with the cough... that is, with different things by touching, by exchanging with things, that is, by getting on and off the bus... I believe that it can be transmitted in any way, in any environment. [whose it is more common:] people who travel a lot. I believe that it is seen more in those who enter very social environments, those who do not protect themselves, that is, those who do not pay attention to cleanliness and hygiene. “
	E08-10	“Sometimes I even say... Did we infect Turkey or something...”

	E01-11	“So it’s just like that, as far as I know, it’s a very big pain.. they told me that they had joint pains, then they had trouble tasting at work.. they had difficulty breathing or something”
	E03-11	“[COVID] is making blood clots (...) blood clotting in the form of embolism.. I know these (...) in general, for example, there is a feeling of weakness..”
	E04-11	“After that, what’s the weakest point? In the body. It looks different on everyone. For example, I [had] burning in my feet.”
	E05-11	“My last thought is, uh... it affects older people a lot. (...) I see that the age ratio has decreased gradually, so from the news.. If you ask where it affects the most, I guess it affects the lungs, I think it affects the heart (...)but my guess is that it also affects the kidneys (...)there may be a blood clot or the sudden emergence of kidney disease in a person who does not have kidney disease out of nowhere.. because it affects the immune system (...)It is not clear from where it will erupt (...)
	E06-11	“...in other people, back pain (...) but I believe it is mostly the lungs”.
	E07-11	“..well, I couldn’t move my knee or my body. I slept for 15 days.. after that, the children are feeding me two bites.. I can’t eat (...)there was debility. . It’s been two months, my knees don’t heal when I go like this, I can’t take it when I buy a little something from the market”.
	E08-11	“...in the lungs...it looked like marble balls, so bright, like marbles... ... on the sides close to the diaphragm, like this, a spongy structure began to form from there (...)For example, I lost my sense of smell. “(...) I got hot and felt bad.. I had a tingling or something in my knees, (...) I gave the test, (...) it was the second day of my fever, it was now the second day of my weakness, (...) As a result of the reaction of my friends, I went and tested... ..the test came back positive.. the effect on him was like this.. I got the flu one day.. It lasted for a day” “[When I’m sick] my mother... had a very high fever (...) I said, you go home. I called the mother-in-law [to look after me].(...) I sent her with the same symptoms. We slept for four days (...). (...) these are the symptoms; Diarrhea, odor, fever, diarrhea like crazy, sorry but I couldn’t reach the toilet, such diarrhea
	E01- 13	“I think of this as something (...) how can I say it. (...) there [in China] for example, people spread this disease; They immediately came up with a drug to develop their country.”
	E02- 13	“Because not everyone is vaccinated, the spread never ends.”
WAYS OF PROTECTION	E01- 12	“So we need to disinfect ourselves as usual (...) we need to pay more attention to our cleanliness. Those who were sick quarantined themselves (...)
	E02- 12	“ But mask is strickly necessary..”
	E03- 12	“Those who have a strong immune system will get through this somehow”(...) ‘for example, as a hygiene (...) things we do routinely as a Muslim anyway’
	E04- 12	“I consumed a lot of vitamins. There are fruits, vegetables and something we learned from our elders. When such allergic cases start from the respiratory tract, it is necessary to eat pickles. We consumed a lot of pickles. I especially recommend it. It has great benefits in the fight against microbes. Spicy, for example, ginger, we bought a lot of turmeric. Because we know the example from India”.
	E05- 12	“.. During the COVID-19 pandemic process, people have formed the habit of washing hands, the use of cologne has increased a little..” “I don’t think the mask protects (...) I think keeping the immune system strong, balanced nutrition is a better measure (...) I think it would be very correct if the ministry of health had followed such a method, we bought propolis from outside, then we took vitamin C, we took a high dose of Liposomal We ate regularly after that. (...) Fruit was very important.”
	E06- 12	“Cleaning, hygiene (...) individuals need to protect themselves..”
	E07- 12	“(...) cleaning... of course... body cleaning, hand cleaning, clothes cleaning (...) Neither we were there nor they came to us”
	E08-12	“(...) everyone says mask, mask, mask, but I do not believe that the mask protects.”

COVID-19 SURVIVORS	E01- 14	“They didn’t get over [COVID] very hard, they got through it very lightly. (...) as far as I know, they had great pain, joint pain, (...) they had difficulty in tasting, (...) they had difficulty in breathing. (...) drugs were already available at that time (...) vaccines were not yet available (...) they tried to be treated with the drug method.”
	E02- 14	“There were also friends who went to intensive care. My best friend”
	E03- 14	“My brother got sick, for example (...) he didn’t use any medication.. he survived covid for example..”
	E04- 14	“My mother-in-law and father-in-law passed away from COVID-19. Since my wife is a nurse, she helped her family in the intensive care unit and she got sick too. She’s had her vaccinations. So I [forced] to be.”
	E05- 14	“I’ve had it 3 times myself. My mother had it, my sister [had it]. He had a cough, he had bone pain, his basic reactions and ailments were the same, the same as the people I met. A friend of mine was hospitalized and I think he was also hospitalized because he was taking medication. I’ve never let anyone in my family take drugs. I have seen that those who are hospitalized or those who take drugs have a heavier time, but as I said, those who have strengthened their immune system and taken external supplements have a milder time.”
	E06- 14	“(…) I think it varies according to the person (...) it varies according to the body (...) I believe it also varies genetically (...) it showed different things on the side of my family and my wife. That’s why I strongly believe in the genetic factor.”
	E08- 14	“[When I was sick] my mother (...) got quite a fever (...) I said, you go home. I called the mother-in-law [to look after me]. (...) I sent her with the same symptoms. We slept for four days (...). (...) I only know that my uncle was very agitated and was in hospital (...) I spoke on the phone two or three times; He was coughing nonstop.”
THE REALITY OF COVID 19	E01- 15	“ I think they are trying to spread such diseases and develop their own countries (...) They are trying to spread this disease [from China], then invent the medicine and work to raise their own country a little more (...) every year a disease will appear.”
	E03-15	“Normally, for example, I don’t even believe that there is a pandemic right now. (...) “Well for me, for five to six months I am not using mask and in this way, I did not get COVID” (...) It is said that the population worldwide is very dense, the population of eight billion people is too much, and they will reduce it to five hundred million. (...) According to my research in internet those who have chronic disorder or disabled, (...) these people are somehow burden for the state somehow with this vaccine (...) were planned to kill.”
	E04- 15	“(…) what happened is unknown, and it has not been explained by the medical authorities.”
	E05- 15	“In the period from the time of COVID 19 until today, if someone shows me under the electron microscope or digital microscope that this is the virus, I will kiss him on the forehead”.
	E06- 15	“So I think the covid 19 disease is something like a biological war like this”
	E08- 15	“At first, I believed that such a disease existed, that it killed people, but after seeing patients [because I am a healthcare worker] day by day, after seeing that such things do not exist, I started to think that such a thing does not exist or does not kill, if there is..”
SOURCES OF INFORMATION ABOUT THE DISEASE PROCESS	E01- 16	“So like this, from what I heard on the internet...”
	E04- 16	“We get information from the bulletins given by the Ministry of Health through the press.”
	E06- 16	“I follow from the media”
	E07- 16	“I see you on TV”
	E08- 16	“I began to disbelieve that such a disease really killed the sick, because I saw it. Whether it’s in the media, shuddering deaths, reports of exploding lungs, playing sports”

CONCERNS SPECIFIC TO THE DRUG USED IN TREATMENT	E01- 17	“There is no such thing as treatment [with medication] that will be very good for the disease. Medicines may have a huge impact on us. We are not aware of this. That’s why I don’t have much confidence in drugs (...) for now”
	E02- 17	“Yes, the drug used in the treatment of malaria was used at first. Sometimes, expired drugs were given and they had too many side effects. We were exposed to effects that could not be seen right away, which could be seen in the next period. Some of my relatives also used it, so I don’t think it is a very effective treatment, an effective solution.”
	E03- 17	“(…) favimol, plaquenil, aspirin. (...) There have been quite a few people [around me] who have fallen into intensive care. That is, after [those experiencing] a heart condition use the drug” “But all I know is that he/she did not use drugs in the treatment and survived the disease
	E04- 17	“[Favimol] was banned around the world a year ago. It continued for a year in Turkey. It is a very sad event.”
	E05- 17	“For example, favipiravir was used. The Ministry of Health later changed it. (...) I think that drug therapy was wrong from the very beginning” “We lost most of our people to heart attacks, just because of the medicine they gave (...) but in death reports it was written as contagious disease, covid 19 and buried”
	E07- 17	“The doctor gave me medicine, I used it (...) thank goodness I am fine (...) I drink a lot (favimol), it made my tongue black, but I am fine, thank goodness.”
	E08- 17	“Because why 8 drugs are given to a person, they poison people. (...) if someone commits suicide, he takes 8-10 drugs anyway. That’s why I don’t believe it much.”
	THEME-2 COVID 19 INDIVIDUAL FACTORS THAT MAY CAUSE VACCINE REFUSAL OR HESITANCY	
CONCERNS SPECIFIC TO NON-COVID 19 VACCINES	E01- 18	“As I said, dear doctor, I have a child, for example, I had my child get all the other vaccines. I am in no way opposed to it.” “Of course it has to be done. I absolutely support it.”
	E02- 18	“For example, it is a combination vaccine we made from childhood, I say BCG as an example; we didn’t have any problems with these”
	E03- 18	“Absolutely reliable.”
	E04- 18	“(…) I haven’t had any vaccinations of either of them. I’m not a very confident person in vaccines...”
	E05- 18	“[The children] don’t have any ailments, they don’t have any problems. They did not catch any contagious disease. (...) Allah has created the body in a beautiful way, I think that it can only continue as a healthy individual by supporting the immune system. I don’t find it very accurate because there is no official statement about the shot or the content of the vaccines, the physicians do not know anything about the side effects. Imagine a little boy and you inject something into his body, no one knows what it is. I don’t find it very right, so vaccinations.”
	E06- 18	“I believe in maybe measles, chicken pox, other things in childhood, but I don’t think it will have much effect in old age”
	E07- 18	“If you don’t get vaccinated, you will catch the disease (...) your body will get infected, you will get sick”
	E08- 18	“I supported it because its validity is now accepted, (...) its protection is very high, (...) because it is applied to children, because it takes a certain time, because it is reliable.”

<p>CONTENT OF THE COVID 19 VACCINEVE</p> <p>CONCERNS ABOUT THE PRODUCTION PROCESS</p>	E01- 19	“[I trust childhood vaccines] But when it comes to covide, I say, no! Covid is not guaranteed. Yes, I can’t say that’s guaranteed. That’s why I don’t plan to make my child do it either. I don’t plan to have it done myself.”
	E02- 19	“After I [others] were vaccinated, especially after BioNTech, I saw a lot of side effects. I didn’t want to have it done. (...) Sinovac, for some varieties of COVID, (...) has evolved quite a bit anymore I think [Sinovac] is not enough, it is as if the person has been injected in vain. (...) I had some friends who got sick [after the vaccine], who ended up in intensive care. (...) I chose not to do it more because it was after vaccination (..) I think the vaccine does just as much harm. Because the virus, which is constantly given to the human body every 6 months, does not seem very innocent to me.”
	E03- 19	“I think cases are increasing as the smacks hit. [Post-vaccination] embolism or myocardia, stroke, I’ve seen many patients. (...) it’s been getting shot anyway for about 1 year [despite vaccines] cases are increasing (...) I don’t think any study of the vaccine will benefit because it’s a shape-shifting virus. (...) where it is hit, it creates an electromagnetic field. (...) In Israel, 90% are currently vaccinated; So the vaccine doesn’t help. (...) What is important to me is scientificity. (...) If a vaccine happens in three years, if it goes through three phases, this also applies to the Turkish vaccine. If the Turkish vaccine has not completed this process, it has no validity for me.”
	E04-19	“We were proud [because] the Turks [for making the vaccine in Germany]; but it doesn’t inspire confidence (...) I bought the Chinese vaccine because it was dead (...) [COVID vaccines] This is a vaccine presented in phase two trials. We became phase three. So we were a live experiment. Because there have been too many human deaths. And they turned a blind eye to it.”
	E05- 19	“It is not very right for all countries to find, remove, approve and immunize people and shoot a vaccine in 6 months when even the measles vaccine has been approved in 6-7 years (...) mRNA vaccine shots, people do not know what it changes.” (...) “How do they approve and shoot something as dangerous as an mRNA vaccine? (...) I’m not very keen on the domestic vaccine either. I think he also has income anxiety. (...) So the main reason we don’t get vaccinated is that it’s not approved (...) it’s basically because we don’t know what its contents are, which is a virus that hasn’t been isolated. (...) I isolated a person from the virus, this is the virus, this is the vaccine (...) I kiss the forehead of that physician, that researcher, that professor.”
	E06- 19	“I believe that no one should be vaccinated before their experiments are fully completed. (...) God knows whether the vaccine protects or not. (...) I think that international powers throw away the virus and this is a war of some kind” (...) it can cause a heart attack, a stroke, a barrenness.
	E07- 19	“When I saw [on TV] that they were dead, I said I’m going to die too, why am I going to get the vaccine shot and die? (...) There were always people who died from the Germans, I said that I would not get the German vaccine, I would get the Chinese vaccine.
	E08- 19	“What will happen with the domestic vaccine [as a child] we shot the native. it didn’t happen. (...) that’s the vaccine. The foreign vaccine, if I’m going to get a shot, why not get shot. (...) If the time is enough, I will get that vaccine and die. (...) I’ll shoot the Turkish vaccine, why not get shot?”
	E08- 19	“I see it as an experimental board. (...) they say it themselves, they have moved on to human experimentation. Why don’t you approve of this in phase three [Turkovac]?”

<p>CONCERNS ABOUT THE IMPACT OF NOT GETTING THE COVID 19 VACCINE</p>	<p>E01- 20</p> <p>E03-20</p> <p>E05- 20</p> <p>E06- 20</p> <p>E08- 20</p>	<p>“People are holding back a little like this, “they’re not vaccinated, look”. In this way, a thought is formed. It’s like marginalizing you [by society] a little bit. Inevitably, it has quite an impact on both your social life and your normal life.”</p> <p>“I wonder if [the vaccine] has a guarantee, will it breed other diseases, or are they injecting something else or poison into our bodies. It has inevitably settled in people’s subconscious in this way.”</p> <p>“Unless there is a scientific explanation, that is, when people have a doubt in their minds (...) I think society can split”</p> <p>“Our employer said to me, ‘You think about yourself, why don’t you think about other people’; And I said, ‘Have you been vaccinated,’ ‘I’ve been shot,’ ‘I’m shot,’ and I’ve said, ‘Why are you afraid of me, then?’”</p> <p>“It’s like a war against each other, but right now, when people see someone positive with COVID 19, they put gloves on their hands, put 2-3 masks in their mouths and run away as if they have seen a bogeyman (...) So there’s a world of fear, there’s a pumping of fear in the press, on TV. People don’t think at all, they’re just afraid of the positives that are named.”</p> <p>“Not being vaccinated or being shot is limited to the rights and freedoms of the person. I have respect for people who were shot, but if I show them that respect, I think it’s my decision not to get shot, and they have to show me the same respect.”</p> <p>“On the population of our country or the world (...) I think it will have a huge impact on health, on reproduction, going forward. (...) I think there’s a lot of damage it can do to every system in your body.”</p> <p>“I’m very worried about my future. People who have been vaccinated, the children who will be born of them, they are our future (...) I don’t think they will be very healthy individuals.”</p> <p>“ Namely each individual should get themselves vaccinated or not, it must left to their preference (...) Some things should not be forced. If people are free for everything they should be free in this subject”(…) I’m afraid that if the vaccine really, really protects, I’ll stay in the plague. Otherwise, I don’t really want to get the vaccine because I don’t want to have something injected into my body that I don’t know what’s in it.”</p> <p>“What would happen [in the community] if there was no vaccine would be natural immunity in humans. If they left us, we would not get through it in a year instead of two or three years without a vaccine. They should not interfere with us.”</p>
<p>THEME 3- NON-INDIVIDUAL FACTORS THAT MAY CAUSE COVID 19 VACCINE REJECTION OR HEISED</p>		
<p>EFFECTS OF THE DISEASE PROCESS ON ECONOMIC AND SOCIAL LIFE</p>	<p>E01- 21</p> <p>E02- 21</p> <p>E04- 21</p> <p>E06- 21</p> <p>E07- 21</p> <p>E08- 21</p>	<p>“[When you don’t get vaccinated] you are already deprived of some things. Whether it’s your social activity or your business life (...) there is a lot of trouble [economically]. People have fallen into poverty [because of COVID] like this. Economically, they [people] are pretty depressed.”</p> <p>“When we were just trying to start socializing again (...) when COVID cases started to be seen, kinship relations were completely over. You have absolutely no activities left to play our child (...) outside in the park with the soil. Therefore, we were exposed to more television, more internet, a more completely digital environment.”</p> <p>“We heard about the death events much later. Months later, I meet a lady Ayşe in the bazaar, have you seen what she is doing? Brother is dead. How was it? He died of COVID-19. He had no ailments either. We hear one. Did he die too? Like everyone else, I heard a lot later. (...) I am afraid of my future. What will these [vaccine] side effects do to us? What will it do to the people around me? It’s fear. Still no explanation. . Currently there is not an explanation. You get vaccinated. Off! Get vaccinated but how can we get vaccinated?”</p> <p>“[People with COVID-19 symptoms] did not go to the doctor, but felt the virus (...) did not want to be quarantined.”</p> <p>“[The vaccinated people] felt a bit more relaxed after the vaccine than they had before they were vaccinated.”</p> <p>“What will happen, let him not let you go to the market, let him not take you to the market, to the bus. We’re not rich so we can go and drive.”</p> <p>“The only reason for not wearing the mask is financially, I wear it to avoid punishment. Otherwise, he cannot wear a mask.”</p>

GENERAL AND HEALTH- SPECIFIC POLITICAL APPROACHES DURING THE PANDEMIC	E01- 19	<p>“I do not get vaccinated with Chinese vaccine. Because you know, this is a disease that came from China. (...) German vaccine and Turkish vaccine were also released. The German vaccine and the Turkish vaccine, (...) if I get shot, I will be torn between these two.” “They had [these vaccines] done and is it effective or not; Does it have any side effects? (...) but since this Turkish vaccine was made later, some things may have had an effect. Because the research has been done quite a bit; Research was done on the Chinese vaccine, research was done on the German vaccine again. The Turkish vaccine made such an impression by doing a lot of research. That’s why I don’t think there will be a problem [in the Turkish vaccine]. (...) other vaccines may be helpful, maybe they will cause another disease later on, maybe we will have another problem, we don’t know. The Turkish vaccine is the same.”</p>
	E01- 22	<p>“We are a little behind in terms of health. (...) We have hospitals, we are in a period of development, but no one is interested. (...) When we are in poor [health] condition, we cannot go to government hospitals. Or when we go (...) there is no one like you or in other hospitals like the private sector.”</p> <p>“Our Minister of Health and something put a lot of effort into it; He tried to interact with the people. He tried to explain something; they approached them with kindness (...) We did not experience any major problems; This was thanks to our healthcare professionals.”</p> <p>“For example if I do not want to get vaccinated I must be free to not to get vaccinated. The mindset should be free in our country. Unfortunately, such things are not very common in our environment.”</p>
	E02- 22	<p>“Full monitoring of people with COVID-19 by the Ministry of Health at that time and isolation at home was not possible. No matter how many closures or how many attempts are made to prevent it, there are too many missing points. There weren’t many edits. (...) It increases as the continuous social communication continues. Now, masks are not worn in any way due to our social policy.”</p> <p>“If necessary, we made interventions to COVID cases without mask and glove”</p>
	E04- 22	<p>“The Ministry of Health did not inform the public about this (vaccine). Didn’t give confidence”</p> <p>“Because they established a nice framework called the medical authority (...) consisting of professors. But even in the delegation, contradictory statements emerged. For example, all of the professors in the delegation said to use masks, and one professor (...) said, ‘The use of masks was unnecessary,’ even though he was officially a delegation.”</p> <p>“The Provincial Hygiene Board dissolved this government in 2011. An [institution] established with the signature of Mustafa Kemal Atatürk. We are one of the rare countries in the world that found (develops) the vaccine. (...) They closed it. We floundered in COVID-19.”</p> <p>“[Society] has been warned to do these things. Tracking [was good]; It was very well organized at first. (...) We heard that the filtration team, mobile teams went all over the city about the villages. They worked very well, they worked selflessly. Doctors worked very well. My wife was working at the time. (...) In other words, I believe that the health personnel work selflessly.”</p>
	E05-22	<p>“The Ministry of Health is doing good things, but I do not believe that it is more correct in terms of treatment, that it is on the right path.”</p>
	E07- 22	<p>“(…) folks are working for us. Of course I would be happy, wouldn’t I be! The minister of health speaks, the man speaks well, but I do not understand (...) I trust [the minister], I do not doubt, I listen to what he says, why should I doubt, the man says everything.”</p>
	E08- 22	<p>“There is no such thing as not getting caught in Covid, the state elders have already announced this. [Minister] said that everyone will have this disease, but come to me in installments, don’t crash my health system. Doctors [dressing] like a robocop or an astronaut, working from morning to night, come the next day that he has become covid, his hair is not visible (...), so there is no way to avoid it. I don’t believe the mask protects. I was protected from other infectious diseases, not from Covid.”</p>
	E08- 22	<p>“Why don’t you approve of it [Turkovac] is in phase three [in] phase. I think the state itself does not trust this.”</p> <p>“Whether you want to be vaccinated or not, I think there is no need to force it like that.”</p>

CONCERNS ABOUT THE VACCINE'S MECHANISM OF ACTION AND TYPES	E02- 23	“Vaccines are the direct injection of that microbe to the human body by breaking it, that is, by creating antibodies.”
	E03- 23	“According to what they say, inactivated vaccine is called inactivated, but again the virus changes shape. So I don't know him exactly.”
	E04- 23	“You are giving a live virus. (...) my disease rate is increasing. (...) This happens after vaccinations.”
	E05- 23	“(…) there is a type of vaccine made by hitting the weakened form of the virus, there is also a direct mRNA vaccine, they think of a treatment method that affects RNA in that way, but (...) hitting a weakened virus is a more suitable method as it will stimulate the immune system. But I don't think the mRNA vaccine is very accurate
	E08- 23	.” “I know one is a live vaccine, injecting the inactivated version of the virus into the body in small doses, so the body gets used to it.”

SIDE EFFECTS OF VACCINES	E01- 24	“I believe that [the vaccine] will either [affect] the kidney or the liver, that is, it will do some harm, albeit a small one.”
	E02- 24	“I saw the embolism [which is a side effect of the vaccine], depending on where the clot went, in a lung, a brain, or where it was blocked, but mostly in the brain and lung.” “I also had friends who had side effects and whose blood pressure suddenly did not hold up and got very high; There were also those who did not show any symptoms as if they were getting a normal hepatitis vaccine. It is related to the person’s body, maybe it changed according to his reaction to the vaccine.”
	E03- 24	“I also searched on the internet (...) it says [BionTech] conducted [experiments] on rats, [death] after 200 days, for example. It was shelved because of this death.” “The husband of my aunt aged 35 years (...) after his vaccination with BIONTECH, a week later (...) he had myocardial infarction. Hospitalized in intensive care unit.”
	E04- 24	“The reason why I am against the vaccine is that everyone has a heart attack, including my brother, many of our friends, including my mother, our young friends, my brother was young, he was 63 years old. He died of a heart attack despite having a heart surgery.” “Many of our friends [got vaccinated], including my mother, including my brother. (...) my older brother was also young, he was 63 years old. He died of a heart attack despite having heart surgery. (...) In other words, it triggers two things in young people, cerebral hemorrhage plus heart attack.” (...) Brain diseases increased, brain hemorrhages increased; (...) no explanation. This is what removes the feeling of trust.(...)” “[The vaccine] triggers two things in young people: Cerebral hemorrhage plus heart attack. So, I think it goes like this, this vaccine brings forward the diseases we will experience ten years from now.” “My friend’s lung cancer was stopped. But because he was afraid, he got vaccinated the third dose. After the third dose my friend’s cancer case was exaggerated. And he died in a month.” “[My wife’s] right side has pains and it still hasn’t gone away. He says, ‘My smell of sweat has changed’ (...) My brother is nearly 70 years old and says, ‘I don’t have the strength I used to have’. The third (vaccine) was very heavy, I didn’t hear anything about the rattling Chinese vaccine.”
	E05- 24	“Rather than benefits, [I think] there may be huge deaths in the coming years, and that disabled children will be born just because of the side effects of these vaccines; because they shoot the mRNA vaccine, people don’t know what it’s changed” “We lost one of our staff with three vaccinations due to a heart attack.” “I think that the mitigated virus may have the effects that covid 19 did; because if the immune system is low after being hit, it can make that person positive and activate the same virus (...) but because the mRNA vaccine changes the RNA sequence or affects it, even the person who made it doesn’t know its results. I think there will be huge losses in 5 years; especially about RNA vaccines.” “[As a side effect] because they had a lot of fatigue; there were coughs; bone aches” “I think it will have a huge impact going forward.”
	E06- 24	“There is a vaccine from China. I know BionTech is having a harder time” “Some said that their arms hurt, some said my heart was beating, some said it was too heavy for me, some said my back hurts.”
	E07- 24	“My arm is falling, my legs are falling, my legs are breaking,” he said. “My son was vaccinated; the evening was fine; He fell ill the next day and slept (...) until the evening. My bride was over-hyped; He said that two days were fine, on the third day (...) my knee hurts. [PhD] drugged (...) now it’s fine. (...) Sevim’s arm is swollen.”
	E08- 24	“Two or three days of pain in the arm where he was vaccinated, I did not see it, but only heard it. I’ve heard of patients who had a heart attack after phase two. It is said to cause inflammation in the heart.”

COVID 19 INTERACTION WITH CHRONIC DISEASES	E01- 25	“This is not just a case of COVID, for example, it could be the plague, or it could be measles, it could be any disease.”
	E02- 25	“If there is pain in the back, I saw that back pain increased more in the case of this COVID case. If there was a problem in the lung in the past, I have seen that the lungs are affected more quickly when I have COVID. Even the one whose arm ached told me that I could not stop from the pain in my arm during the COVID period. We could not stabilize the blood pressure of those with hypertension. I think it appears directly when the person’s immune system is low.”
	E05- 25	“If a person is disturbed by any organ, (...) it will be easier to catch this disease as it will automatically affect the immune system, or I think it may trigger another underlying disease more quickly. (...) heart failure may occur, kidney failure may occur, circulatory problems may occur due to blood coagulation. It can trigger different other ailments in the lungs.”
	E06- 25	“We have asthma in our family genetically.(...) I have had the same symptoms; but not on my wife’s side. (...) I think it is related to asthma, [effectively] in breathing. We had more difficulty in breathing like this (...) we had pain.”
	E08- 25	“I don’t know if it’s related to COVID or not, I’ve never read it..”
POSITIVE OR NEGATIVE EFFECTS OF RELIGION AND NATIONAL AFFILIATION ON VACCINATION	E01- 26	““[God] says, ‘Stay away from things that will harm your body. When we think from this point of view, I don’t think there will be any problem if this vaccine is beneficial for me in terms of our religion, and I don’t think so. Because you are using this method to restore your body to health. That’s why I don’t think there will be a problem in terms of religion.”
	E03- 26	Since we look at the issue from a health point of view, not from a religious point of view, if the vaccine is beneficial for us, why not do it. But (...) they have to explain everything to me scientifically. That’s why he doesn’t have anything (disabled) religiously “I do not look at the event as domestic or foreign. What is important to me is science
	E04- 26	“Our religion makes a lot of things easier. For Muslims, there is no problem (...) religiously (...) I have never heard of it from anyone, nor have I heard it from my environment.”
	E05- 26	“Indeed, we have created man completely and completely,” Allahuta’ala says. Whatever is missing in a person’s body, Allah has put it into his body or has given you all the blessings that can be taken from outside. I don’t think the vaccine is very accurate. But there is something like this; It is best to take the precaution and leave the discretion to Allah. But it is your duty to investigate what this precaution is.” “There is a vaccine, it is said, this is a treatment method, but it is not right to go and get shot without doing any research, saying that this is the method of treatment, while millions of people around the world have woken up to this and are awakened to their harm.” “Because God will ask us to account for this body, where did you use it? In other words, he will ask, “Why did you shoot this vaccine?”
	E06- 26	“I don’t think it is religiously correct to be shot just because the state suggested it.” “I don’t know much about other religions, but in terms of my own religion, he said that whatever problem our religion has, God gives the cure. That’s why our religion has made it clear that all kinds of cures can be sought, and any means can be used. For this reason, I do not think that there is a problem in terms of religion.”
	E07- 26	“Anybody who do have get afraid if it is foreign vaccine. God save us from foreigners. To kill the Turk is another thing, if they let the vaccine for vaccination to kill the people. Let’s get the vaccine out so the Turks get shot and die. If the nation dies, it would matter to them? Are they Turk so they have consience my son,”
	E08- 26	“By God, I don’t want to enter religion at all. I don’t have that much faith in religion as much as vaccination. I don’t want to comment either.”
DISEASE EXTINCTION PROCESS	E02- 27	“Because the vaccine has a six-month protection, the person gets two doses of the vaccine and says, ‘Oh, I’m protective now; It doesn’t completely infect me,” he says. When a third vaccine arrives, when the sixth month is up, the person is a candidate to catch COVID again, since there is no amount of protection left. So I think 6 months is a very short time. So maybe if a different solution could be found, it might have been more of an obstacle to the spread of COVID. And because not everyone is vaccinated, the spread never ends.”
	E08- 27	“What will happen [in the community] if they don’t get vaccinated, people will be naturally immune anyway. If they let us go, we will survive in a year, not in two or three years, without a vaccine. Don’t let them interfere with us.”

Diskusija

Naš plan sa ovom studijom je bio da otkrijemo stvarne obrasce ponašanja kod onih koji izbegavaju/odbijaju COVID-19 vakcinaciju. Na početku pandemije, nošenje zaštitnih maski je bila jedina zaštitna mera i javnost nije odbijala ili potcenjivala ovu meru, verovatno jer je stopa smrtnosti bila visoka, a postojala je i velika nepredvidivost pandemije. U poređenju sa izbegavanjem/odbijanjem COVID-19 vakcina, upotreba maski je bila prilično visoka¹⁷.

Troje naših pacijenata je odbilo da koristi maske, za razliku od ostalih petoro, koji su ih odobrvali i koristili. U početnim danima pandemije, kada je smrtnost od COVID-19 bila vrlo visoka, javio se nedostatak maski. Turska vlada je odlučila da nabavi i isporuči vakcine javnosti na početku zatvaranja. Pre pandemije, zaštitne maske su smatrane primarno medicinskim instrumentom i trebalo ih je koristiti u posebnim medicinskim prostorima, kao što su hirurška odeljenja, intenzivna nega, urgentne službe itd. I nedostatak maski i problem u isporuci vodili su relativno niskoj upotrebi maski u ranim periodima pandemije, ali nije bilo neke posebne reakcije javnosti, kao što je bio slučaj sa vakcinama¹⁷. Neke od izjava iz našeg istraživanja u vezi ovog problema:

“Ja evo pet-šest meseci ne koristim masku i zato nisam dobio COVID.” E03

Ova studija je započeta godinu dana nakon početka pandemije u uslovima kada je neizvesnost oko COVID-19 relativno nestala. Tokom perioda našeg istraživanja, većina stanovništva u visokom riziku od COVID-19 bila je vakcinisana SINOVAČ i BIONTECH vakcinama (zdravstveni radnici i stare osobe)¹⁸.

Učesnici u našoj studiji su bez problema usvojili druge preventivne i terapijske mere, osim vakcina, jer su bili dobro informisani o znacima, simptomima, terapijskim merama i prevenciji. Sa druge strane, s obzirom da su dobijene informacije od strane zdravstvenih vlasti ili medija o COVID-19 vakcinama bile ograničene, učesnici u našoj studiji nisu adekvatno odgovorili i izbegli su/odbili COVID-19 vakcine. U stvari, različite metode su korišćene za proizvodnju COVID-19 vakcina i nije bilo postvakcinalnih kliničkih podataka duže vreme. Bilo je puno studija dizajniranih da se bave ovim pitanjem, ali je prikupljanje podataka još uvek bilo u toku¹⁹. Verovatno su zato nacionalne zdravstvene vlasti dale detaljne informacije o preventivnim merama, kao što su npr. zaštitne maske, ali relativno ograničene informacije o vakcinama²⁰.

“Trenutno nema objašnjenja. Vakciniši se. Idi! Vakciniši se, ali kako?” E04

Primitili smo da su informacije o širenju infekcije, koje su davale SZO i Ministarstvo zdravlja, pratili i učesnici ove studije, ali u određenom stepenu su bili podozrivi prema ovim nacionalnim i internacionalnim institucijama/organizacijama (E05, E02, E04, E03).

Discussion

We conducted this study to uncover the real reasons why some people are avoiding or refusing to get the COVID-19 vaccine. In the early stages of the pandemic, wearing face masks was the main protective measure, and people generally accepted and valued this intervention due to the high mortality rate and the unpredictable pandemic situation. However, compared to face mask usage, the avoidance or refusal of the COVID-19 vaccine is more widespread¹⁷.

Three of our participants refused to use face masks, unlike the five others who approved and used them. In the early stages of the pandemic, when the mortality rate of COVID-19 was very high, there was a severe shortage of face masks. The Turkish government decided to supply and deliver the face masks to the public itself at the beginning of the lockdowns. Before the pandemic, face masks were primarily considered a medical instrument and should be used in special medical environments such as surgical wards, intensive care units, and emergency units. Both the shortage of masks and problems in delivery led to a relatively low rate of mask use in the early stages of the pandemic, and there was not an overwhelming public reaction to masks, unlike vaccines¹⁷. Here are some statements from our study group regarding this issue:

“For five to six months, I haven’t been using a mask, and I still haven’t contracted COVID.” E03

This study was initiated a year after the start of the COVID-19 pandemic when uncertainty about COVID-19 had decreased. During our research, the majority of the high-risk population for COVID-19, including healthcare workers and the elderly, had been vaccinated with SINOVAČ and BIONTECH¹⁸.

The participants in our study had no trouble adopting preventive and therapeutic measures other than vaccines. They were well-informed about the signs, symptoms, and prevention of COVID-19. However, they did not respond positively to COVID-19 vaccines due to limited information provided by health authorities and the media. The production of COVID-19 vaccines involved various methods, and there was a lack of long-term post-vaccination clinical data. Although many studies were being conducted and data collection was ongoing¹⁹, the national health authority provided detailed information about preventive measures such as face masks but gave relatively limited information about the vaccines²⁰.

“Currently there is no explanation. Get vaccinated. Off you go! Get vaccinated, but how can we get vaccinated?” E04

We found that participants in the study mostly followed the information about the spread of infection provided by the World Health Organization (WHO) and the Ministry of Health (MoH). However, some participants expressed suspicion about these national and international institutions/organizations (E05, E02, E04, E03).

Čak i zdravstveni radnici su pokazivali ambivalentnost u vezi vakcinacije, jer je bilo ograničenih informacija o dugoročnim efektima (preventivni nivo i mogući neželjeni efekti) COVID-19 vakcina. Visok morbiditet i mortalitet na početku pandemije je značajno pogurao istraživače da proizvedu vakcinu. Kasnije, kurs vakcinacije se značajno usporio, paralelno sa smanjenjem u oboljevanju i umiranju²¹. U tom kontekstu, nepoverenje javnosti se značajno smanjilo prema antivirusnim lekovima za lečenje COVID-19²². Informacije koje je dalo Ministarstvo zdravlja o upotrebi antivirusa koji su bili blizu isteka ili sa isteklim rokom može biti objašnjenje za ovo nepoverenje²². Drugi uzrok nepoverenja prema preventivnim merama protiv COVID-19 može biti i uverenje učesnika da je nekoliko zemalja proizvelo ovu bolest kao “biološko oružje” i pustilo je da se proširi.

“Uzrok odbijanja vakcinacije (...) Mislim da su internacionalne vlasti pustile ovaj virus i da je ovo neka vrsta rata.” E06

Činjenica da vakcinacija odraslih nije tako raširena kao vakcinacija dece u Turskoj može biti jedan od uzroka izbegavanja/odbijanja COVID-19 vakcina, jer ne postoji navika vakcinisanja odraslih. Program vakcinacije, primarno za decu, je jedna od najuspešnijih preventivnih mera Turske Republike od njenog osnivanja. Stopa vakcinacije dece je preko 90% za prvu, drugu, treću dozu ili bustere uopšte²³. Nasuprot ovoj činjenici, relativno brz proces proizvodnje COVID-19 vakcina je verovatno pobudio sumnju u prihvatanje vakcina i doveo do izbegavanja/odbijanja (E08, E04).

Uglavnom, napor ili objašnjenje civilnih ili naučnih autoriteta da sprovedu obaveznu vakcinaciju može biti efikasan način da se stanovništvo vakciniše, ali može uzrokovati i paradoksalne reakcije odbijanja COVID-19 vakcinacije.

“Ljudi moraju da imaju slobodan izbor za ove stvari. Na primer, ako ja ne želim da se vakcinišem moram da imam slobodu da se ne vakcinišem.” E01

Iako je Turska proizvela vakcinu protiv COVID-19 (TURKOVAC) u ranom period pandemije, zakasnilo se sa njenim obezbeđivanjem za javnu upotrebu, a i dve druge COVID-19 vakcine su već bile u upotrebi. Negativna mišljenja i sumnja u zemlje koje su proizvodile ove vakcine je iznad svega bila racionalna.

“Vakcinišem se turskom vakcinom (...). Svako ko se vakciniše uplaši se ako je to strana vakcina (...). Ubiti Turčina je druga stvar, ako dopuste da vakcina ubije ljude (...). Ako su Turci, imaju savest, sine moj.” E07

Jedan od motivacionih faktora za ljude koji su želeli TURKOVAC, tzv. “domaća vakcina” je bio taj što se vakcina proizvodila u Turskoj. Jedinstvena briga u vezi ovog nacionalnog proizvoda mogla je da bude relativno kasna naučna publikacija u vezi ove vakcine. Prva naučna publikacija u vezi TURKOVAC pojavila se treće godine pandemije^{19,4,20}.

Što se tiče druge dve vakcine korišćene u Turskoj, ali proizvedene u inostranstvu (SINOVAC i BIONTECH), bilo

Even healthcare workers were unsure about getting vaccinated because there was limited information about the long-term effects (both positive and negative) of COVID-19 vaccination. The high rates of illness and death in the early stages of the pandemic pushed researchers to develop vaccines quickly. As vaccination rates decreased, so did illness and death rates²¹. This led to a decrease in public distrust of antiviral drugs used to treat COVID-19²². The Ministry of Health’s recommendations on using near or outdated antivirals may have contributed to this distrust²². Some people also believe that COVID-19 was intentionally created as a biological weapon by certain countries and allowed to spread, which has led to further distrust of preventive measures for the disease.

“Well...the cause of vaccine refusal could be due to the belief that international powers purposely spread the virus, viewing it as a form of warfare.” E06

It is worth noting that adult vaccination is not as common as childhood vaccination in Turkey, which may be a reason for the avoidance or refusal of COVID-19 vaccines. The vaccination program for children has been one of the most successful health prevention measures in the Turkish Republic since its establishment, with childhood vaccination rates generally exceeding 90% for the first, second, or third doses, or boosters²³. In contrast, the relatively rapid production process of the COVID-19 vaccine may have raised concerns about its acceptance and led to avoidance or refusal (E08, E04).

Efforts and explanations by civil or scientific authorities to establish mandatory COVID-19 vaccination may be effective but could also trigger paradoxical reactions against vaccination.

“People must be free to express their ideas. For example, if I do not want to get vaccinated, I must have the freedom to choose not to do so.” E01

Despite Turkey producing a COVID-19 vaccine (TURKOVAC) early in the pandemic, it was not made available for public use until later. As a result, two other COVID-19 vaccines were used instead. This delay was due to negative considerations and concerns about the countries that produced these other two vaccines, which overshadowed rational considerations.

“I got vaccinated with a Turkish vaccine (...). Anybody who has received a foreign vaccine might be afraid (...) Killing Turks is one thing, but if they allow the vaccine to harm people, that’s another(...) Do Turks have a conscience, my son?” E07

One of the motivating factors for people interested in getting the TURKOVAC, the so-called “domestic vaccine,” was the fact that it was being produced in Turkey. However, there was some concern about the lack of scientific publications about this national product, as the first scientific publication about TURKOVAC did not appear until the third year of the pandemic^{19,4,20}.

je reakcija, naročito protiv BIONTECH. Glavni uzrok zabrinutosti mogao je biti tip i mehanizam dejstva ove vakcine (relativno nov način proizvodnje antitela). Uz to, moramo reći da je bilo ograničenih informacija o neželjenim efektima mRNA vakcina i publikacija o neželjenim efektima sa smrtnim ishodom^{21,22}. Refleksija ovih briga može se videti i u razmišljanjima naše studijske grupe, u smislu neželjenih efekata mRNA vakcina na vitalne organe.

“Muž moje tetke, star 35 godina (...) nakon vakcinacije BIONTECH, nedelju dana nakon vakcine (...) imao je infarkt. Hospitalizovan je u jedinici intenzivne nege. Kasnije je rečeno da su njegovi krvni sudovi bili zapušeni. Nije imao srčanih problema ranije.” E03

Čak je rečeno da su neželjeni efekti bili planirani namerno od strane proizvođača vakcine ili onih koji su ih podržavali kako bi se naškodilo ljudima.

“Koliko sam pretraživao internet, oni koji imaju hronične bolesti ili su invalidi, (...) ovi ljudi su, na neki način, teret državi i na neki način sa ovom vakcinom (...) bilo je planirano da se ubiju.” E03

Za vreme pandemije, glavni izvor informacija za javnost o COVID-19 (infektivnost i simptomi) su bili mediji. Različiti izvori na internetu, alati na društvenim mrežama i novi sajtovi, naročito TV programi plasirali su veliku količinu informacija²³. Neke od ovih informacija su bile “prljave informacije” ili su bile reklame javnih službi bazirane na zvaničnim informacijama. Specijalisti, lekari i ekonomisti su izražavali sopstvena mišljenja o efektima COVID-19 na njihove profesije u TV programima nekoliko meseci. Međutim, ova tendencija se smanjivala između kompletnih zatvaranja i kraja izolacije, tzv. period “normalizacije.” Nakon ovog perioda, naponi da se razviju i proizvedu nove vakcine bili su primljeni sa manje pažnje u medijima. Možemo reći da su kompleksne informacije, koje su stizale iz medija i posledični nedostatak informacija o vakcinama u istoj meri izazivali konfuziju u društvu.

Činjenica da je naše istraživanje sprovedeno temeljno, učešće antropologa među istraživačima i zdravstvenih radnika među učesnicima (izbegavanje/odbijanje) može se označiti kao snaga ovog istraživanja. Međutim, broj učesnika može se smatrati ograničenjem

Za vreme COVID-19 pandemije, nemogućnost ljudi da dođu do validnih informacija o vakcinama zbog intenzivnih “prljavih informacija” i infodemije je postala izražena²⁴. Danas, iako ima više vrsta komunikacija i mogućnosti da običan čovek pristupi ovim informacijama, količina infodemije se čak povećala²⁴, a ne smanjila. Širenje prljavih i izvrnutih informacija u medijima je povećalo izbegavanje/odbijanje COVID-19 vakcinacije, stvarajući na taj način ozbiljnu pretnju javnom zdravlju²⁵. Pošto je deljenje informacija o naučnim dostignućima sa javnošću bilo relativno sporo, zdravstvenim radnicima je bilo teško da se bore sa “prljavim informacijama”. Iz ovog razloga, da bi se poboljšala zdravstvena pisme-

There has been noticeable hesitancy towards the BIONTECH vaccine, which is one of the two vaccines used in Turkey but produced abroad (the other being SINOVAC). This reluctance may be attributed to the type and mechanism of action of the BIONTECH vaccine, which involves a comparatively new method of antibody production. Furthermore, it is important to highlight the limited information available on the adverse effects of mRNA vaccines, as well as the scarcity of publications on fatal adverse effects^{21,22}. Our study group's concerns about the adverse effects of mRNA vaccines on vital organs are a reflection of these broader apprehensions.

“The husband of my 35-year-old aunt experienced a myocardial infarction a week after receiving the BIONTECH vaccination. He was hospitalized in the intensive care unit and it was later revealed that his blood vessels were blocked. Prior to this incident, he had no history of cardiac disorders.” E03

It was claimed that the reported adverse events were deliberately planned to harm others by the vaccine producers or their supporters.

“According to my internet research, there are claims that those with chronic disorders or disabilities are considered a burden to the state and are being targeted by the vaccine.” E03

During the pandemic, the primary source of information for the public about COVID-19, including its infectivity and symptoms, has been the media. Various internet resources, social media platforms, and news sites, particularly TV programs, provided a wealth of information²³. Some of this information was inaccurate, while some was in the form of public service ads based on official information. Specialist physicians, politicians, and economists shared their own opinions about the effects of COVID-19 in their respective professions on TV programs for several months. However, this trend decreased between the full lockdown and the end of the isolation period, known as the “normalization” period. After this period, less attention was given to the efforts to develop and produce new vaccines in the media. It can be said that the complex information conveyed by the media and the subsequent lack of information about the vaccines at the same rate may cause confusion in society.

The in-depth nature of our research, the involvement of an anthropologist among the researchers, and the inclusion of health professionals, as participants, who declined to participate can be cited as strengths of this research. However, the limited number of participants may be viewed as a weakness.

During the COVID-19 pandemic, a lot of inaccurate and misleading information about vaccines made it difficult for people to find accurate information. Despite the increase in various communication channels, the amount of misleading information, also known as “infodemia,” has continued to grow²⁴. This has led to a rise in vaccine hesitancy due to the spread of distorted information in the media, posing a serious

nost javnosti i sprečile dezinformacije, unapređenje znanja zdravstvenih radnika je postalo najbitnije.

Zaključci

Smatramo da je brza promena informacija o COVID-19 i vakcinaciji mogla biti uzrok nekonzistentnosti javnog mišljenja. S toga, haotična sredina je i usporila tehnološku fleksiju naučnog znanja na društvo i oslabila napore zdravstvenih vlasti. Činjenica da je bilo nepoznanica o metodama proizvodnje i dostupnosti vakcina koje su zahtevale visoku tehnologiju može biti razlog izbegavanja/odbijanja vakcina. Individualni odgovor na pandemiju u javnosti je pre doveo do pojave nacionalističkih ideja nego izražavanja univerzalne reakcije održavanja identiteta. Zato možemo zaključiti da je nacionalizam prevazišao upotrebu naučnih informacija.

Finansiranje. Nema.

Conflict of Interest. Jedan od naših autora (Mümtaz M. Mazıcıoğlu) je koistraživač u kliničkoj studiji TURKOVAC.

Dostupnost podataka. Podaci iz ove studije mogu se deliti sa drugim istraživačima ako ih zatraže.

threat to public health²⁵. Health professionals faced challenges in combating this misinformation because the dissemination of accurate scientific information was relatively slow. It became essential to improve the health literacy of the public and update the knowledge and skills of health professionals to combat misinformation.

Conclusions

There was uncertainty about the methods used in the production and availability of vaccines that require advanced technology, which may have led to avoidance or refusal. The rapidly changing information about COVID-19 and vaccination might have caused inconsistency in the public's understanding. As a result, this chaotic environment has delayed the technological application of scientific knowledge in society and weakened the efforts of health authorities.

Individual responses to the pandemic in public have led to nationalist ideas, rather than expressing a universal reaction to maintain their identity. Therefore, we may conclude that nationalism preceded the use of scientific information.

Funding. No funding

Conflict of Interest. One of our authors (Mümtaz M. Mazıcıoğlu) is Co-investigator in the clinical study of TURKOVAC.

Data Availability. The data of this study can be shared with other researchers if requested.

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Priljen - Received - 21.01.2024.
 Ispravljen - Corrected - 17.04.2024.
 Prihvaćen - Accepted - 05.05.2024.