Research Paper



Explaining the Reasons for the General Public's Non-compliance With the Policies of the National Anti-Coronavirus Headquarters: A Qualitative Study

Abdollah Dargahi ^{1,} Zahra Zamani² , Mehdi Vosoughi Niri¹ , Hamed Zandian¹ 📵, Yousef Hamidzadeh Arbabi³° 📵

- 1. Social Determinants of Health Research Center, Ardabil University of Medical Sciences, Ardabil, Iran.
- 2. Department of Pediatric Nursing, Isfahan University of Medical Sciences, Isfahan, Iran.
- 3. Department of Occupational Health and Safety Engineering, School of Health, Ardabil University of Medical Sciences, Ardabil, Iran.



Citation Dargahi A, Zamani Z, Vosoughi Niri M, Zandian H, Hamidzadeh Arbabi Y. Explaining the Reasons for the General Public's Non-compliance With the Policies of the National Anti-Coronavirus Headquarters: A Qualitative Study. Health in Emergencies and Disasters Quarterly. 2022; 7(3):145-160. http://dx.doi.org/10.32598/hdq.7.3.445.1





Article info:

Received: 01 Nov 2021 Accepted: 24 Jan 2022 Available Online: 01 Apr 2022

Keywords:

Coronavirus, Instructions, Reasons, Non-compliance, Iran

ABSTRACT

Background: By explaining the reasons for non-compliance with the protocols of the National Anti-coronavirus Headquarters, we can help respond better, make better decisions, and control the risks and outcomes of coronavirus in the future. This study aimed to explain the reasons for the public's non-compliance with the National Anti-coronavirus Headquarters measures from the perspective of academics.

Materials and Methods: The present qualitative study uses a contractual content analysis approach. The study participants were 19 professors and experts of the University of Medical Sciences with the necessary and sufficient information and experience on the subject. A purposive sampling method with maximum diversity in characteristics such as age, gender, education, the field of study, and work experience was used to select the participants. The study data were obtained through semi-structured interviews until data saturation and analyzed simultaneously.

Results: From the content analysis of the interviews, 5 main themes and 7 subthemes emerged:

1) normalization and simplification of coronavirus risk with 5 subthemes of learning weakness, inconsistency in received information, misperception of coronavirus, perceived harms due to the observance of protocols, and the impracticality of some policies and approvals of the National Anti-coronavirus Headquarters, 2) weak communication, trust and low acceptance of the people by the procedures of the Anti-coronavirus Headquarters, 3) lack of sufficient motivation in people to comply with, 4) family-cultural conditions with two subthemes of the emotionality of Iranian families and the received cultural sediments, and 5) weakness in supervision and compassion in the use of force.

Conclusion: The study results showed that from the point of view of academics, there are reasons for people not observing the recommendations of the National Anti-coronavirus Headquarters, which leads to more ineffective control of coronavirus and consequently human, economic, and social damages to the country. Given the importance of coronavirus control in promoting community health and prevention of this disease and its dangers, further understanding of the reasons for non-compliance with the procedures and recommendations of the National Anti-coronavirus Headquarters to plan and carry out effective interventions seem necessary.

* Corresponding Author:

Yousef Hamidzadeh Arbabi.

Address: Department of Occupational Health and Safety Engineering, School of Health, Ardabil University of Medical Sciences, Ardabil, Iran. E-mail: hamidzade2015@gmail.com

1. Introduction

oronaviruses are a large family of viruses that cause various diseases, from a simple cold to severe diseases like the middle east respiratory syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS) that created widespread public health threats. Coronavirus disease (COVID-19) is a new species of that family that was introduced in 2019 [1]. Threats of COVID-19 disease outbreaks have affected the health systems of most countries [2]. COVID-19 was declared an international public health emergency [3]. On January 30, 2020, the World Health Organization declared the coronavirus and COVID-19 disease a public health problem, and current knowledge of the virus's biology and modes of transmission is still limited [4]. The incidence and mortality of COVID-19 are increasing daily, so by December 20, 2021, more than 274 million cases and more than 5 million and 350 thousand deaths have been reported [5]. COVID-19 has affected individuals' health and quality of life, especially those suspected of having the disease [6]. On the other hand, observing the COVID-19 disease prevention guideline is a critical way to control the COVID-19 pandemic [7]. The word "observance" in the Latin dictionary means action or attempt to comply with defined legal, moral, and normative requirements, doing something for religious reasons or job descriptions, and paying attention to something [8]. The World Health Organization (WHO) defines the concept of "observance" as accompanying some behaviors, such as using a prescribed medical prescription, performing health lifestyle factors, and observing the recommendations provided by health care workers [3].

Conversely, inappropriate behavior is a negative concept and shows what the patient is doing contrary to the specialist's opinion. Patients' inappropriate behavior often interferes with the effectiveness of treatment and can have dangerous outcomes [9]. Patient observance of medical procedures is a behavior that predicts successful treatment of the disease, coordinates the patient's behavior with medication and the recommendations of a physician or health expert, and reduces the adverse side effects and severity of the disease [10]. A study reported the overall rate of non-compliance with the above coronary procedures [11]. In another study, non-compliance with medication and treatment ranges from 18% to 71%, which could be the reason for 10% of hospitalizations and 23% of nursing homes. Also, hospitalization rates in the United States have risen from 33% to 69% due to poor adherence and non-compliance with drug prescriptions, which imposes about \$ 100 billion a year in health costs on the US health system. Also, it is reported that those who adhere to medical procedures and take their medications get 20% better results [12]. Research results in recent decades show that clients do not follow the prescribed procedures for various reasons, and non-compliance can take many forms: the recommended procedures are poorly understood, poorly executed, forgotten or neglected, and incompletely observed [13].

Studies have shown that no significant, serious, and practical investigations have been conducted to explain the reasons for observance of the approvals and recommendations of the National Anti-coronavirus Headquarters. In addition, cultural differences and differences in beliefs, lifestyles, health facilities, support systems, capacities, and socio-familial contexts within communities may affect individuals' perceptions, experiences, attitudes, and practices. These effects require further studies and encouraged the need for this qualitative study with a content analysis approach. The main question of the research is whether people observe the approvals, procedures, and recommendations of the National Anti-coronavirus Headquarters.

By explaining people's perceptions of the reasons for non-compliance with health standards, targeted and accurate educational interventions can be designed and planned so that both participation, cooperation, and motivation of people to observe the approvals and recommendations be improved and made propaganda-information and educational-executive programs more effective. Various studies have been conducted on patients' noncompliance with treatment regimens and physicians' procedures. For example, Graham et al.'s study reported that loyalty to President Trump strongly predicts social distance. According to moral theory, there is a significant connection and correlation between binding ethics and loyalty to leaders and observing social distance [11]. In Iran, Naghavi et al. conducted a qualitative study entitled "Factors affecting non-compliance with the procedures prescribed by specialists in outpatient clinics in Iran". According to the study results, various reasons such as individual factors, nature of disease, type, duration of treatment, health care provider, socioeconomic factors, and their interaction affect patients' non-compliance with the procedures prescribed by specialists [12].

The results of Khajehnasiri et al.'s study also showed that depression, financial problems, the experience of drug side effects and disease, memory problems, simultaneous use of several drugs, and complex treatment regimens were the most important barriers to adherence to the treatment regimens of diabetic patients [14]. Shush-

tari et al. have identified and classified 84 social determinants into two categories: structural and intermediate [6].

Maraashi has considered about 20 factors to be effective in people observing the health recommendations in coronavirus conditions [15]: 1) information, 2) presenting conflicting and voluminous messages (many contradictory messages have been sent to the people during the coronavirus outbreak (messages that have described the danger more or less and cause a feeling of helplessness and widespread negligence), 3) the role of medical staff, 4) how to make health recommendations, 5) the role of "belief" and "attitude" (information alone is not enough, but information is effective in increasing health behavior when it leads to "belief" and then to "attitude"), 6) belief in the value of health, 7) pattern of effective health beliefs (belief in the reality of coronavirus risk and understanding the severity of the problem, belief in their vulnerability to coronavirus, belief in the effectiveness of health measures, belief in the benefits of observing health practices at cost corona), 8) "self-efficacy" as a belief, 9) paying attention to the principles of persuasion, 10) the role of scary messages, 11) repetition of the message, 12) good messenger, 13) internalized social norms, 14) positive and negative reinforcement, 15) hardening unhealthy behavior and facilitating healthy behavior, 16) behavior self-regulation, 17) positive and negative internal self-talk, 18) modeling (observational learning) to the community, 19) social support, and 20) ignore slipping [15]. However, no qualitative study was performed to explain non-compliance with coronavirus protocols. This study aimed to explain the reasons for non-compliance with the National Anti-coronavirus Headquarters approvals, procedures, and recommendations from the academic community's perspective.

2. Materials and Methods

The present study is a qualitative study with a contractual content analysis approach that was conducted to explain the reasons for observance of the approvals, procedures, and recommendations of the National Anti-coronavirus Headquarters from the perspective of academics. The participants were 19 professors and staff providing educational and research services to medical students with good knowledge of the subject. A purposive sampling method with maximum variation in characteristics such as age, gender, marital status, education, experience, and work experience was used to select participants. The details of the participants s are given in Table 1. Study participants were selected based on the inclusion criteria of being over 26 years old, having teaching experience, being an educational or research

expert or a faculty member, and being interested in participating in the study.

The study data were collected and analyzed through semi-structured individual interviews. The purpose of the study is stated, and an introduction is requested. Each interview began with an open-ended question: "Please talk about how to protect yourself against coronavirus?" The following questions were oriented and continued based on the participants' answers and the purpose of the study. Interviews were conducted in the participants' offices at the Schools of Medicine, Health, Dentistry, Pharmacy and Nursing, and Midwifery or Classroom Affairs. After obtaining permission from the participants and explaining the reason for using the tape recorder, the content of the interviews was recorded. Each interview took 25 to 65 minutes, but the average interview lasted 33 minutes.

The conventional content analysis approach was used to analyze the data. Immediately after the interview, the text of the interview was transcribed verbatim and reviewed several times to give the researcher a general understanding of the content of the interview. Then, the coding process began by emphasizing the explicit and implicit content, identifying, and highlighting the sentences and paragraphs of the analysis unit. Each unit of analysis was given a code. In the coding process, control researchers checked the codes repeatedly, and in case of discrepancies or inconsistencies, they were resolved by re-contacting the participants. Next, the similarities and differences of the codes were examined, and similar codes were merged and summarized, and then these results were taken into account in subsequent interviews to avoid duplicate data collection. The interviews were stopped when data saturation occurred. The interviews were stopped when data saturation occurred and data saturation was confirmed when the researcher did not obtain new data by continuing the interview and the discovered information was repeated and similar to the previous data and no new code was obtained. In this study, 67 codes were found. By sorting and removing duplicate codes, they were classified into 5 main themes and 7 subthemes. MAXQDA10 software was used to manage the data. The strategies proposed by Guba and Lincoln were used to validate the data [16]. To increase the validity and reliability of the data, a purposive sampling method with maximum diversity was used to consider a broader range of views and experiences of individuals.

On the other hand, reviewing the data by members of the research team (peer check) and reviewing the initial analysis by some participants (member check) helped increase the study's accuracy. To ensure data transferability, the researcher tried to clearly state the context and characteristics of the participants so that readers could follow the data and the current research process. To ensure and observe the research ethics, the necessary arrangements were made to enter the environment and start the research. Necessary explanations of the goals and how to carry out the project were provided to the participants. Oral consent was obtained from the participants, and in all stages, the confidentiality of information and non-use of participants' names were taken into account. The participants were also informed about the right to withdraw at any research stage.

3. Results

Regarding the reasons for following the instructions of the National Anti-coronavirus Headquarters, every behavior that occurs in a person is affected by a set of factors that generally occur during life and forces him to do that particular action. In this study, more than 25 people were asked for interviews on the subject, but 6 did not agree; 19 experts, instructors, and university professors were interviewed according to the previous agreement, whose details are listed in Table 1. Also, more than 60 codes were extracted after extracting the interviews' content. However, after merging and deleting the similarities and classifying the extracted codes, 5 main themes and 7 subthemes were explored, and the titles of these themes and subthemes were inserted in Table 2, and their explanations are presented below.

4. Discussion

Normalization and simplification of coronavirus risk

In any situation, human beings try to satisfy their needs in different situations by learning new skills and increasing their knowledge. In each situation, they experience and see new needs in front of them, and maybe these new experiences guarantee their unique skills, health, and life. In addition, until the modification of social behaviors such as disease-preventing lifestyles in facing COVID-19 and other physical, psychological, and moral harms becomes a standard behavior and culture, health development will be impossible. Unfortunately, the issue of COVID-19 disease has become a matter of "time-lapse" so that in the beginning, the sensitivities of officials and the public were sound, but over time, the sensitivities faded so that the health standards declined sharply in some parts of Iran, according to experts [17]. Therefore, it seems that the most crucial issue regarding compliance with the approvals is the issue of simplification and normalization of coronavirus. The theme of "normalization and simplification of coronavirus risk" is composed of five subthemes: poor learning, inconsistency in received information, misperception of coronavirus, poor welfare, and economic status, and perceived losses and impracticality of some of the headquarters' policies and approvals.

Weakness of learning coronavirus content by people

The learning process is gradual and is done step by step. Every behavioral change requires individual experience and the opportunity to interact with the environment. In addition to the gradual nature of learning, the fragmentation and smallness of learning are also necessary. Also, resistance and abandonment of previous habits are essential in learning, and therefore, individuals do not learn everything at once and immediately but step by step and slowly. Furthermore, individual differences, level of education, cultural status, social and economic, access to information resources and media, etc., are also involved [18]. Poor learning means that people have difficulty learning instructions, approvals, and recommendations, and because they do not learn effectively, they cannot receive and use guidelines, instructions, and training. The lack of learning about coronavirus seems to be related to low basic literacy, occupied, lack of time, and inattention to the training provided by credible media.

People are in a hurry to go to health centers because of work, hardship, and lack of time and then want to return soon. In addition, today's living conditions do not allow people to study, learn, and think enough, and because they do not enjoy attending programs and using the results of study and learning in life, they participate less in educational programs and pay less attention to health messages. Therefore, their learning process is disrupted. Participants express various interpretations of the lack of learning and its causes in coronavirus epidemics. Participant number 1 said: "Some people do not have a mind; no matter how much you explain to them, they do not learn; their brains cannot understand". Participant number 2 said: "When you ask people what they have learned about coronavirus, they do not know, some may not be intelligent, or their perception may be weak, which is more due to media". Participant number 3 remarked: "The main problem is that people do not have basic literacy. When they do not have basic literacy, it does not matter how much one explains about transmission methods, virus mutations, or ways to prevent coronavirus". Participant number 10 said: "The fact that people do not observe the recommendations is due to three things, one is illiteracy and ignorance, the second is stubbornness,

Table 1. Demographic characteristics of the participants

Variables	No. (%)	
Age (y) Minimum age: 28 years Maximum age: 56 years Average age: 38.45	<30	5(26.5)
	30-40	6(31.5)
	40-50	6(31.5)
	>50	2(10.5)
Gender	Female	5(26.5)
	Man	14(73.5)
Marital status	Single	3(15.8)
	Married	16(84.2)
Number of live children Minimum: 1 child Maximum: 3 children The average number of children: 1.81	No children	4(21)
	Have children	15(79)
Education	Bachelor's degree	4(21)
	Master's degree	5(26.5)
	PhD	10(52.5)
	General practitioner and specialist	3(15.7)
	Environmental Health Engineer	1(5.3)
	Occupational Health Engineer	1(5.3)
	Master of Midwifery	1(5.3)
	PhD in Health Education	2(10.5)
	PhD in Nursing	2(10.5)
	PhD in Clinical Psychology	2(10.5)
	PhD in Sociology	1(5.3)
	Science	3(15.8)
	Public administration, education, and health services	3(15.8)
Work experience status (y) Minimum history: 3 years Maximum history: 29 years	<10	4(21.1)
	10-20	10(52.5)
Average history: 17 years	>20 years	5(26.4)

|:|ealth In | Emergencies and | Disasters | Ouarterly

and the third is poor learning". Learning disabilities seem to be primarily related to perceptual problems. Perceptions are the basis of human science [19]. Perception is a mental process during which sensory experiences become meaningful. After receiving and interpreting, emotions lead to perception, and the evolution of this perception leads to recognizing some phenomena [20].

This process is not formed probably due to various factors such as poor learning, illiteracy, occupied mind, lack of time to interact and learn, positive or negative previous experiences, low reading culture, unrelated topics, and commands, receiving contradictory information, individual inefficiency, imitation of others and disbelief in

Table 2. The primary and subthemes explored in the study

Row	Main Category or Theme	Subtheme
		Learning weakness
		Contradiction in the received information
1	Normalization and simplification of coronavirus risk	Incorrect social perception of coronavirus
		Low welfare and economic situation of the people and perceived losses
		Unpractical part of the policies and approvals of the National Anti-coronavirus Headquarters
2	Weak communication, trust, and acceptance of people from the National Anti-coronavirus Headquarters	
3	Lack of sufficient motivation in people to obey	
	Family-cultural conditions	The emotionality of Iranian families
4		Received cultural sediments
5	Weakness in supervision and compassion in the use of force	
		l‡lealthin Emergencies and ⊅]isasters (0)uarte

the educational content of health workers and doctors, conditions and family upbringing.

Moreover, when perception is not formed, cognitions about the value and status of "observance" do not occur. When there is no cognition, the correct attitude is not formed. Furthermore, when the right attitude is not developed, self-efficacy does not form or decrease, and as a result, following the approved and recommended behaviors in society is not observed [10]. In addition to poor perception, the issue of cognitive dissonance may also be raised because some people may be well aware of the dangers of coronavirus but may not be able to implement the expected behaviors due to the conflict between beliefs and behaviors. If they follow the recommended behaviors, their interests are at stake, and this causes a mismatch between their beliefs and behaviors [11].

Contradiction in the received information

One of the dangers of crisis management is the existence of multiple and conflicting messages. Moreover, when multiplied, information turns against itself, so communication must replace information. Officials only provide information and do not notice that bombardment and giving too much information does not cure pain, especially since many people are unfamiliar with scientific terms and concepts [21]. Furthermore, inconsistencies in the information provided have also contributed to impaired public decision-making. Decision-making means choosing a solution from different ones and a process that contains specific steps, and the more careful the de-

cision is considered and observed, the more successful it will be [22]. However, in coronavirus, providing a lot of true and false information has made some people unable to make the right decision. When they cannot decide, they will not observe the approvals of the National Anticoronavirus headquarters.

Currently, a lot of data and information are provided to the public, but this information has virtually no effect on their behavior. In this regard, the media sometimes suffer from these contradictions and are ineffective in public education. These issues create information inconsistencies in the people, disrupting the approvals of the National Anti-coronavirus headquarters. Unfortunately, despite the formation of the National Anti-coronavirus Headquarters and the presence of a spokesman for the Ministry of Health, various voices and information about coronavirus are provided from official and unofficial sources.

When there is no coordination between the media and the executive organizations in providing information to the people, and the organizations do not cooperate, the result is inconsistency in the information received by the public, distrust, and consequent non-compliance with protocols will increase the incidence of coronavirus. Participants have different interpretations of this situation. Participant number 8 emphasized: "The words and decisions of the government and the radio and television are contradictory. For example, closing mosques, but the show 'Durhami' is being broadcast'. Alternatively, Participant number 7 said: "It is not all the people's fault; we are not South

Korea and Italy, the offices should have been closed! The government says one thing, the media says another when the government itself is not cohesive, resulting in us losing more and more". Participant number 16 believed: "The contradictions in the policies have left people frustrated and distrustful of the government's actions against coronavirus, leading to disregard for the news and the demands of the authorities. In these circumstances, people disobey instructions and recommendations, even if they know that disobeying the order will cause harm to them and their families". Participant number 13 said: "The dishonesty in the speeches and messages presented by the government and the media makes people always pessimistic about them, and this makes people unable to make good decisions". Participant 17 said: "The statements and behaviors of the officials are very contradictory, so people get confused and do not observe them".

In explaining this finding, it can be said that according to some experts, people have been subjected to severe information bombardment about coronavirus and have suffered from a kind of conflict and information disorder, which make them unable to take the right decision. When they could not make a decision, they would not comply with the approvals of the Anti-coronavirus Headquarters, and now the state of society shows this condition. For this reason, the Iranian Health Education Association has called for confronting the high volume of inaccurate and unscientific information and taking appropriate measures to prevent cyberbullying against coronavirus and COVID-19 [21].

People's social perception of the danger of coronavirus

Social perception is one of the most fundamental aspects of social life. Our efforts to understand the people around us are part of our daily lives. We always try to understand the current feelings, moods, and emotions of others and how they feel about a particular subject, and then continue the relationship based on that initial perception [23]. Still, months after the global coronavirus spread, some people do not take the coronavirus risk seriously. While taking messages seriously and institutionalizing a culture of obedience to the law in society leads to self-control and social control, as in most countries in Southeast Asia, China, Korea, and Japan, self-control behavior among the people is common. Perhaps one of the reasons why coronavirus is not taken seriously is related to some people's misunderstanding about its nature and danger, which hinders their intellectual and scientific development and prevents them from observing the coronavirus guidelines [24].

Exciting comments on the lack of seriousness of the extent and severity of coronavirus risk were expressed by Participant number 1 as follows: "Unfortunately, in Iran, we are used to joking, making fun of everything, even the corona. I always tell my students in class that the reason we Iranians are not progressing is something called ridiculous mind. We ridicule everything, both the people and the officials, who are also part of the same people. For example, several thousand people work for hours on a topic, and then someone suddenly says that it is impossible in the main meeting. In this one sentence from a ridiculous mind, everything falls apart, like the issue of empty house tax, so it seems all our problems today". Participant number 3 said: "unemployment, poverty, high prices, lack of culture, and thousands of other things are just because we are never serious". In explaining this finding, we can say that in most cases, the first perceptions are significant because, with them, we form and coordinate our future relationships with others and society. This is because most people are ready for and wellcome the first acquaintances, information, and other situations, and it seems that these first perceptions have a lasting effect on social thinking and behavior [23]. In addition, if the message and the educational subject are not understood, errors and mistakes may occur. These issues are also confirmed for some people who do not comply with the recommendations and protocols of coronavirus. Unfortunately, one of the issues involved in controlling the coronavirus is people's ignorance in recognizing and understanding this virus, overlooking it, and not paying attention to the recommendations of specialists [25].

Of course, people are not to blame because most people in our country have low primary education and are self-employed. They had to work even in dangerous conditions and lacked enough time or patience to study and understand the nature of the coronavirus. In any subject, including the coronavirus, we must study, read, and think enough to understand it properly.

When we have the proper understanding, the correct belief is formed in us, and an attitude is created when a belief is formed. When an attitude is formed, the intention to perform the behavior is provided. When we accept the behavior, do it, and try it, that behavior is internalized, and when we internalize the behavior, we no longer leave it. This explanation corresponds to the stages of attitude formation, Bandura's theory of social learning, and social perception [26]. Two participants confirm this discussion. Participant number 17 said: "Unfortunately, the real face of the disease and the critically ill are never shown to the people, and only a few officials come and say with a smile that I also got a coro-

navirus and thank God, I got well and this will affect the correct understanding of the people". Participant number 1 also emphasized: "People all think that this disease was not so dangerous that it was announced late, and because people do not understand it. unfortunately, they overlook the instructions and announcements, which, unfortunately, we shall all suffer from the consequences".

Low welfare and economic status of the people and perceived losses from compliance

One of the most important reasons for non-compliance with the coronavirus protocols is the people's low welfare and economic status. Today, people compare themselves with others, and when the economic distance between them is far, they become inattentive to law enforcement [27]. In addition, the considerable differences in the social classes in cities and towns, inflation, rising prices, living costs, etc., cause people who do not have enough income to live inevitably ignore the regulations to meet their needs and go to work every day. Participants expressed differing views. Participant number 19 said: "When citizens do not enjoy good welfare and socioeconomic status, they cannot be expected to comply with the law properly". Participant number 10 asked: "Should people take it seriously? What should they do? Does anyone provide them with food and necessities? In our city, it is announced through loudspeakers not to leave the house. Moreover, the governor has turned the city into a ghost town, but no one tells whom to bring people to eat? What happens to miserable people?" Alternatively, participant number 17 said: "The government should pay the salary of each family for a few months. Then tell them to sit in the house. The government only says stay at home and subsidizes 450000 Rials (\$1.5); what do they expect from the people? Here in Iran, everyone in every class needs help. A group of people lives in situations where they cannot change their lifestyle and living environment. For example, people living in the suburbs never think about changing their lives.

A group of people is in a special economic and occupational situation which not only unwilling to fight the coronavirus but is indifferent to suffering and dying from it, so that, they can get rid of their miserable life". Participant number 15 said: "The first thing in public health, especially during an epidemic. Is public access to treatment and medical care at a reasonable cost? However, the cost of the coronavirus examination, lung CT scan, and medication have led some people to say, 'God willing, it is a cold". Participant number 16 said: "A person, given the exact symptoms of the disease, has been diagnosed and should be quarantined, but for fear of losing

his job has come to work and infected several others". In explaining this finding, the National Anti-coronavirus Headquarters' instructions, guidelines, and recommendations are lawful and binding, but some people do not comply with the law because they lose benefits by complying with these rules. That is, the damage received is one of the essential factors in non-compliance with the approvals and recommendations of the National Anti-coronavirus Headquarters, so if people expect to profit from compliance with the approvals, they will comply with those approvals, but if not, they will ignore the approvals. Consequently, the person will consider the issue simple and low-risk and will not adhere to the approvals.

Ineffectiveness of some policies and approvals of the National Anti-coronavirus Headquarters

The law is a social control that originates with the transformation of stateless societies into state societies with two characteristics. It is accepted as a model of behavior because deviation from it can be met with an executive guarantee aimed at forcing obedience with punishment. Second, this executive guarantee is exercised by a panel of brokers who have been explicitly empowered to perform this task [27]. When the law does not provide the general interests and is not socially acceptable, the desire to enforce the law also decreases in most individuals. In this situation, everyone easily breaks the law and does not comply with the approvals. In other words, some approvals are not enforceable from the moment of enactment, and some laws are incompatible with social justice. In addition, a law may be socially acceptable but not enforceable. Under these circumstances, passive conditions naturally occur in society, and the problem of lawlessness arises. Shutting down everywhere and telling people to stay at home does not have enough executive grounds and will be inapplicable to a part of society. Perhaps one of the reasons why people do not comply with the instructions of the Anti-coronavirus Headquarters is that the grounds for these recommendations are impractical for many people, including employees of private companies, businesses, and freelancers. Many people refer to their "lack of a stable income" for not complying with home quarantine, and this can be explained by Durkheim's theory of social structural pressure [28]. Participants have referred to this issue in various comments.

For example, Participant number 6 quoted a salesman as saying, "A salesman who has no savings and if he does not go to work one day, his family will go hungry, he will be unable to miss work even for a day, how can he stay in quarantine, even on the day of Ashura?" Participant number 13 said: "A friend says we want to get

serious, but we cannot. He works for an electricity company. He is in charge of servicing and maintaining the high-voltage power grid and repairing it with his operator. They have to work longer hours than usual. When four technicians, an expert, a worker, and a driver sit together in a car on a mission, it is impossible to observe health issues unless the mask and gloves remain on the mouth, which is also difficult". Participant number 15 said: "If the poor worker does not go to work one day, he has to beg. How can he comply with the protocols? Also, for those who do not have a fixed salary and work a paid day or make a living as a peddler and selling fruits and vegetables in the back of the van, etc., the quarantine order and not leaving the house makes no sense". Participant number 5 also confidently emphasized: "I think those who do not comply with protocols are weak and self-defeated people who do not know anything. Otherwise, four tips are uncomplicated: wear a mask, wash hands, do not gather and observe distances, and do not travel". In explaining this finding, it can be said that some approvals may not be enforceable, but this is no more than an excuse for some people in the community, and those who raise the issue of non-enforceability of approvals lack high self-efficacy.

Self-efficacy is defined as the confidence of individuals in performing a particular task. Self-efficacy is a fundamental principle and a central construct of social cognition theory that directly affects the individual's healthrelated behaviors and other cognitive determinants. For example, people with stronger self-efficacy set higher goals, expect positive outcomes, and see obstacles as achievable as challenges. There are four sources of selfefficacy. The first and most important is the experience of skill, which means that a person's self-efficacy becomes very strong and invulnerable when he or she sees himself or herself as successful, especially in the face of obstacles. The second source of self-efficacy is the experience gained from observing valuable social patterns. The third source of self-efficacy arises from social persuasion by valuable individuals. Finally, the fourth source of self-efficacy is rooted in one's physical and emotional states when judging one's abilities [29]. People with higher self-efficacy are better able to adapt and continue health-promoting behaviors, so when a person cannot comply with the approvals, he will feel low selfefficacy and be inattentive to the approvals. This inattentiveness will lead to the normalization and simplification of coronavirus epidemics.

Weak communication, trust, and acceptance of people from the Anti-coronavirus headquarters

Trust is one of the crucial aspects of human relations and the basis for participation and cooperation between members of society. In a trust-based environment, tools such as coercion to enforce the rules and regulations and the rights of others lose their effectiveness. Trust accelerates participation in various economic, social, political, and cultural fields and increases people's willingness to cooperate with different social groups. In general, trust can be considered the basis of any society's social capital, which plays a central role in creating a suitable environment for the success of programs [30]. On the one hand, the distrust of society towards the health service providers and, on the other hand, the non-acceptance of education from the media and doctors and managers cause people to hesitate in communicating and accepting the received education. When in doubt, the correct belief is not formed. Moreover, the right attitude is not created when there is no belief. Many participants believed that people's distrust of employees and government officials was the reason for their incompliance and non-acceptance of orders. Some of the participants s' opinions in this regard are interesting. Participant number 3 said: "Our difference with China is that they created a culture, and people trust the officials, but in Iran, people do not trust the knowledge and honesty of the government and officials and consider themselves wise, and everyone is trying to find a solution and deal with the problem". Participant number 12 said: "The government criticizes the people and vice versa. We have a distrust of each other that is getting deeper every day. Because we have not learned the rules of social life and are not familiar with our duties, the government accuses the people of inaction and vice versa, and most importantly, no one trusts the media". Participant number 18 said: "This virus will be with us for a long time, so we must change our lifestyle and live with this disease. The first step is building trust and increasing social responsibility". Participant number 19 said: "If we put together the various actions of the government over the past few months, the people become worried and distrustful of the government's actions in the fight against the coronavirus, and the result is the same disregard for the news and officials demands. In this situation, everyone disobeys any order, even if he or she knows that disobeying the order will cause harm".

In explaining this finding, we can say that strengthening trust and increasing social capital in society is one of the main strategies to convince people to comply with norms and regulations. The instructions, guidelines, and recommendations of the National Anti-coronavirus

Headquarters are no exception. Because the basis of the social capital theory is the relationships between members of society, proper interaction enables individuals and communities to commit themselves to each other and the interests of society, thereby connecting to the power structure. When groups and friendships develop and become attached to the government and enjoy the respect and material and spiritual benefits, they feel a sense of belonging to the governing rules and accept the government's demands. In this environment, mutual trust is created and grows, and when mutual trust is established, individuals and society develop, and offenses and crimes decrease. Also, to build trust in society to fight the coronavirus, we need to unite organizations and devices. Examples of institutions that well demonstrated the coalition against coronavirus were the alliance of the Basij and the Islamic Revolutionary Guard Corps, the police, and volunteers of the Red Crescent Society with the Ministry of Health and the universities of medical sciences [31].

Lack of sufficient motivation in people to comply with

Nothing we do in our lives is devoid of purpose and motivation. There are many goals in life, and everyone has a motivation. The difference in motivations and tendencies of people in life is due to the differences in values and criteria. What determines a person's criteria and values is attitude and vision towards himself or herself and the world and the structure of belief that has been accepted. If the goal is not met, we will also lose our motivation for it [32]. For example, if employees are motivated to redouble their efforts at work, when they are not encouraged by managers, they will also lose the motivation to work hard. Also, if the clients are motivated to receive services with incentives in health centers, then if incentives are not provided, clients will lose their motivation and will cooperate less.

On the other hand, in the theory of rational action and planned behavior, a person's motivation to obey affects mental norms. For example, some women believe that they should obey their mother-in-law. Otherwise, they would be out of favor of their husbands, or many people would be motivated to obey religious leaders, or sometimes a person in the peer group should accept his group, and if he or she acts contrary to their norms, the group does not accept him or her. In such cases, the person acts under the influence of the motivations and pressures of others [33]. In addition, research shows that motivated people are more likely to work together in difficult situations, and better results will be obtained from programs [34]. Motivation may be internal or external. It is much

more effective if a person follows the recommendations and methods through internal motivation, but external motives such as encouraging and punishing in improving human social behavior should not be underestimated. Enforcing the rules, if done correctly and on time, will be very effective in maintaining order and control of the coronavirus. Progress in the coronavirus control process will also be imperceptible when the motivation to cooperate in compliance is low. From what the participants said, it appears that the approvals and recommendations of the National Anti-coronavirus Headquarters have become standard for most people, and they come to work for various reasons, including fatigue and to lower the tolerance threshold, without sufficient sensitivity and motivation, which increases the prevalence of COVID-19 disease.

Participants have different opinions in this regard, some of which are mentioned here. Participant number 8 said: "Economic problems, unemployment, and poverty, followed by all kinds of social problems, are on the side of the issue, and the lack of fine and deprivation on the other side, and all this has left many unmotivated. If some people comply with health care, such as wearing masks, because those around them and their families do not get infected, they prefer disobedience". Participant number 16 said: "In my view, the psychological stress resulting from livelihood constraints and pessimism about the government and the public media has made people unmotivated to maintain order and comply with coronavirus rules". Participant 19 said: "When peddlers or street vendors constantly call customers, advertise their products, and talk with a mask, and social distance is considered a barrier to overselling, they no longer have the motivation to pay attention to recommendations". Participant number 18 said: "The situation is such that no one has the necessary motivation to observe health unless it has attracted people's attention in creative ways, because now everyone knows how dangerous this disease is, but no one observes it". In explaining this finding, it can be said that one of the essential components in health education models is motivation. Motivation is an internal or external force that motivates a person to do or not to do something. Motivation comes from various sources, including knowledge, attitudes and skills, goals, technical preparations, external threats, and incentives from the mass media and community leaders. Various studies show that people are motivated when they have a good knowledge and attitude towards the programs' goals [35]. Therefore, awareness, attitude, and trust must be created between the system and the people. Lack or weakness of motivation has been shown in other studies [36].

Family-cultural learning

This theme has two subcategories: family and culture.

The emotional nature of Iranian families is an obstacle to complying with the law

The formation of most human behaviors occurs in the family. In addition, each family has its way of socializing with children. Some families are stricter about violating behaviors, and some ignore their children's mistakes and treat them with tolerance. Moreover, these differences in dealing with mistakes cause children to behave differently in society, which is why we see a variety of behaviors in complying with the protocols related to coronavirus. Despite many warnings from various channels, including radio and television networks, press, news sites, health officials, and community models in the form of banners, clips, posters, speeches, and interviews, regarding the observance of social distance, closing down the party, celebrations, mourning, refusal to travel, and not meeting family and relatives. However, it seems that high tensions, bonds, and emotional tendencies among Iranians have caused people to travel and, despite warnings to visit parents in other cities, attend family weddings, funerals, birthdays, and graduations, go from one city to another or from one corner of the city to the other. These trips will transmit the coronavirus to others.

Moreover, habits such as shaking hands, hugging parents and children, kissing, sitting intimate, and not observing distance within families are also the cause of disease spread. Participant number 18 recounted: " What should I do if I have not seen my family for several months and I have to see my mother during this late summer vacation. I can no longer come when the schools start". Participant 19 said: "Honestly, I have no interest in traveling. However, I am worried my aunt will be upset with me because she only has one daughter, and we waited a few months for the coronavirus to disappear. However, this virus has been with us for a long time. So they organize a small ceremony, and we have to go and participate in it. I have not seen my family for more than 6 months. I did not even go on New Year's holidays. I was exhausted and had to accept this trip despite the warnings. Of course, I try to observe the recommendations. Furthermore, now I have the mask and the alcohol spray".

Participant number 15 said: "I live in an apartment, and I see that, especially on Thursdays, the children of one of my neighbors gather at their father's house, and this case often repeats, and it seems as if you are not

warning them not to party!" In explaining this finding, it can be said that the family environment has a very decisive role in the formation of human personality, character, and behavior, and human behavior, which is a sign of his personality and character, is mainly due to family upbringing [23]. A lawful family environment disciplines and regulates individuals, and vice versa. Therefore, if the family disobeys the laws of society and in the family, lawlessness and disorder in society will increase. In such circumstances, the coronavirus will spread and, conversely, the existence of a network of social interactions and links (formal and informal) between individuals and family, structured and classified social groups, and working groups are influential in the integration and connection of the individual with society and the regulation of actions [37, 38]. In the case of coronavirus, unfortunately, this network worked negatively, so we must use methods to form family and friendship networks properly and safely in coronavirus conditions to get rid of this virus sooner.

Received cultural sediments

Another factor that, especially in third world countries, for non-observance of norms and orders is culture, sediments, and received cultural roots. It means that instead of causing social condemnation, non-compliance with legal restrictions from the viewpoint of most people in society is a kind of cleverness with neutrality and silence or community satisfaction, which has historical and cultural roots. In Iran, the culture of obedience to the law has not been institutionalized yet, and if done, it will be good self-control and social control [39]. Being in a hurry in daily activities, not paying attention to the outcomes of circumventing the law, low media literacy of the people, and the collective habit of inattentiveness will effectively ignore all kinds of health protocols and instructions. In addition, a group of individuals may adhere to low-value hereditary and cultural-ethnic sediments due to their low intellectual capacity, lack of foresight, and strong interest in obsolete cultural relations. So, they behave contrary to the recommendations of the National Anti-coronavirus Headquarters. There are many habits, customs, and traditions, in society that behaviors should be based on [40]. In Iran, cultural topics and structures are very diverse; the national Nowruz, Nature Day, and Yalda night, the ceremonies and parties of the holy month of Ramadan, and mourning ceremonies in the months of Muharram and Safar, all have the potential to increase the spread of the virus. Days of Tasua and Ashura, summer trips, and the reopening of Schools have triggered the third and fourth waves of the virus. Although most people do not participate in these ceremonies, some do.

Participant number 15 said: "A friend narrated that a man came to Khalkhal City from Tehran with his wife and caused the whole family to get the disease, and unfortunately, his father died". Participant number 17 said: "I stay at home and watch programs on TV, but I have seen some relatives go to visit their parents during these months or go to their villages to watch the Ashura ceremony". Participant number 19 said: "Although the authorities have banned the memorial service for the deceased, some families still attend the funeral, and as they say, especially teenagers and young people do not observe the health". Participant number 19 said: "Recently, after the ban on holding ceremonies for the dead in mosques, some people in the monasteries have taken up their seats and held ceremonies, and unfortunately, its dimensions are increasing day by day. In the early days, even the relatives of the deceased were not allowed to accompany for burial".

In explaining this finding, it can be said that deviant behavior, like other social behaviors, is learned through socializing with others. Just as peers, through communication with compatible people, accept the norms and cultural values of that group and society and adapt to it, on the contrary, some people, when interacting with norms or lawbreakers, tend towards them, and the issue of inconsistency with norms and regulations is raised [41]. In other words, when people attend various gatherings and ceremonies and see others present, they agree with them. This agreement makes people more courageous and inclined to commit violations; in other words, being in the community sometimes facilitates performance. Because according to social facilitation theories, the presence of others, through evaluation or motivation, often facilitates and enhances one's performance. In such circumstances, the ugliness of violating the law disappears, and noncompliance of some people worsens, which requires decisive treatment of those who commit misdemeanors by the misperception of culture and subcultures.

Weakness in continuous monitoring and compassion in the use of force

The survival of any society depends on its social order based on society's accepted laws. Accordingly, the ruling law causes the stability of society, and lawlessness causes the collapse of society [39]. Seriousness, assertiveness, and strictness regarding quarantine and restrictions can significantly reduce the number of infected patients. People in the community can be divided into three groups regarding coronavirus conditions. The first group is those infected with the coronavirus who have suffered physical and psychological damage. They almost obey.

The second group comprises people who have taken COVID-19 disease seriously since the early days of the coronavirus outbreak in the community and still adhere to health guidelines. In other words, these people care about their physical and mental health. The third group is people who no longer care about the coronavirus; they are indifferent to it. These people go on unnecessary trips, attend parties and crowded gatherings in public, do not observe the physical distance, do not wear masks, and easily associate with others [42]. The latter group is probably those who use the "denial" defense mechanism in the face of anxiety caused by the coronavirus. To inform the third group about COVID-19, we must first invite them to self-awareness and warn them about the outcomes of simplifying coronavirus disease. If the warning about the negligent outcomes of the virus is repeated several times and does not work, punitive and deprivation crimes should be used. Participant number 13 said: "Many people are indifferent to the coronavirus because there are no fines". Participant number 16 said: "Only fines and deprivation of social services for individuals and trades that do not comply with health protocols can prevent this scourge". Participant number 5 said: "If all offices were closed and cities were quarantined, people would realize the depth of the catastrophe". Participant number 12 said: "In such cases, governments must, as in wartime, declare a state of emergency and deal with the perpetrators as severely as possible". Participant 19 said: "These disrespectful formal and informal individuals and institutions should be dealt with so that others know that the phenomenon of coronavirus delinquency is being combated and not simply ignored". Of course, some interviews took place at the beginning of the summer season, and today the closure strategy is being implemented. In addition, unfortunately, the government has paid for the use of force too late, and it has only started mainly in metropolitan and provincial capitals.

In contrast, in many parts of the world, since the beginning of the coronavirus epidemic, the ways to fight coronavirus included cash and non-cash fines, deprivations, and even imprisonment [30, 43]. Participant number 11 said: "Because we are used to always being forced to do something, we have to use force here as well". Participant number 14 said: "Because a badtempered and strict educator in our country is more successful than a good-natured educator, and we have more respect for strict university teachers and professors, coronavirus should also be taken seriously because our people are always used to being forced". Participant number 19 said: "People suspected of having coronavirus and do not comply with health guidelines and patients who leave quarantine should be deprived

of social services at the offices". In explaining this finding, it can be said that some people are afraid of fines and do not comply with the rules and norms of society as long as no punishment is expected for not observing health standards [27]. In other words, although the basic foundation of the social system is interaction based on discipline and rules of behavior, when a person feels that his interests are jeopardized by observing the approvals and recommendations, he will not submit to the approvals. Furthermore, maybe that is why businesses, trips, and purchases are not closed, so what makes some of the approvals of the Anti-coronavirus headquarters less effective is the lack of sufficient executive guarantees and the lack of continuous supervision over the implementation of these approvals. Therefore, restrictive strategies such as fines and deprivation of services should be used to reduce violations and lawlessness in society, incentive strategies, and strengthen the cohesion of society and social capital [44]. In this way, appropriate executive guarantees to support law enforcement, especially officers and health workers, to strictly enforce the law should also be considered in this regard. In short, complying or non-complying with the approvals of the National Anti-coronavirus Headquarters is a behavior. Based on the foundations of sociological and educational theories, it is claimed that due to the complexity of social phenomena, none of the theories of sociology and education alone have the power to analyze and study disobedient behaviors, deviations, and violations. Furthermore, if all these theories are put together, they can accurately explain non-compliance behaviors, deviations, and violations of approvals. Experts believe that in analyzing behavior, four basic principles should be considered. First, most of the behavior of individuals in society is taken from culture, socioeconomic conditions, and individual-family contexts. Second, health-related behaviors are formed by events and reactions that occur in the individual and social environment, and when these conditions change, there is a possibility of changing personal behavior. Third, the environmental conditions necessary for learning new behaviors are not necessarily similar to those for maintaining behavior over time. A program designed to introduce and teach new behaviors to the target group requires developing a different strategy to provide long-term support to maintain and adopt health practices, which was very rare in our society in the case of coronavirus. Fourth, the internal conditions like beliefs, awareness, self-belief, intentions, and feelings of self-efficacy can be exhilarating to watch what people do or say. Communication programs should focus on individual behavior and the physical environment, i.e.,

observable events, to achieve the desired behavioral changes [45-48].

5. Conclusion

In the present study on the reasons for non-compliance with the approvals of Anti-coronavirus Headquarters, we obtained 5 themes of "normalization and simplification of coronavirus risk" (with 5 subcategories of learning weakness, inconsistency in received information, incorrect social perception of coronavirus, low welfare, and economic status, and perceived losses and impracticality of some of the policies and approvals of the National Anti-coronavirus Headquarters), "weak communication, trust, and acceptance of people of the Anti-coronavirus Headquarters," "lack of sufficient motivation to obey," "family-cultural conditions" (with two subclasses of the emotionality of Iranian families and the received sediments), and "the weakness in supervision and compassion in the use of force," as reasons for non-compliance. Considering the importance of coronavirus control in promoting community health and disease prevention, accurate understanding of policymakers, managers, health system staff, and people of the reasons for people observing the approvals and recommendations of the Anti-coronavirus Headquarters in the community for better planning and more effective interventions are necessary to address the identified causes and reduce the damage of this disease.

The suggested solutions to reduce lawlessness in the community, especially concerning coronavirus, are policy-making and enacting flexible laws, providing credible and consistent information to the public through national channels of communication, coronavirus education with the same content in educational centers with the use of appropriate audio-visual techniques, building trust in society by fulfilling promises, increasing the social acceptance of the coronavirus laws and guidelines and institutionalizing a culture of respect and obedience to the law, providing grounds for law enforcement, increasing motivation and responsibility among the people, cooperation of all organizations and monitoring the implementation of decrees, executive guarantees appropriate for dealing with offenders in the community. We will probably see more self-control and social control over coronavirus if these suggestions are executed.

The unwillingness of some colleagues to participate, prolongation of interviews, marginalization, and withdrawal from the topic of discussion, the unpreparedness of some interviewees, negative and critical speech instead of looking positively at the topic, and lack of suffi-

cient experience of participants in the field of qualitative research wee some of the limitations of this study.

Ethical Considerations

Compliance with ethical guidelines

This article was extracted from the research project number (IR.ARUMS.AC.IR. REC.1399.194).

Funding

School of Health, Ardabil University of Medical Sciences funded this study.

Authors' contributions

The authors equally contributed to this work.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

The authors would like to thank all the professors and university officials of Ardabil University of Medical Sciences, the staff and student of Ardabil University of Medical Sciences, and all the person who participated in the study and helped us in carrying out this research.

References

- [1] Poursadeqiyan M, Kasiri N, Khedri B, Ghalichi Zaveh Z, Babaei Pouya A, Barzanouni S, et al. The fear of COVID-19 infection one year after business reopening in Iranian society. Journal of Health Sciences & Surveillance System. 2022; 10(3):284-92. [DOI:10.30476/JHSSS.2021.92000.1279]
- [2] Arefi MF, Babaei AP, Barzanouni S, Ebrahimi S, Salehi AR, Khajehnasiri F, et al. Risk Perception in the COVID-19 pandemic; a health promotion approach. Journal of Education and Health Promotion. 2022; 11:118. [DOI:10.4103/jehp. jehp_1162_21] [PMID] [PMCID]
- [3] Eastin C, Eastin T. Clinical Characteristics of Coronavirus Disease 2019 in China: Guan W, Ni Z, Hu Y, et al. N Engl J Med. 2020 Feb 28 [Online ahead of print]. Emergency Medicine. 2020; 58(4):711-2. [DOI:10.1056/NEJMoa2002032] [PMCID]
- [4] Ghalichi Zaveh Z, Babaei Pouya A, Ghanbari SagharlooN, Azizi Fard L, Abdollahi M, Khammar A, et al. Designing a tool for measuring Preventive Behaviors Against Coronavirus (PBAC) in lifestyle and homebased jobs of Iranian. AOH. 2022; 6(2):1218-23. [Link]

- [5] Soltaninejad M, Babaei-Pouya A, Poursadeqiyan M, Feiz Arefi M. Ergonomics factors influencing school education during the COVID-19 pandemic: A literature review. Work. 2021; 68(1):69-75. [DOI:10.3233/WOR-203355] [PMID]
- [6] Shushtari ZJ, Salimi Y, Ahmadi S, Rajabi-Gilan N, Shi-razikhah M, Biglarian A, et al. Social determinants of adherence to COVID-19 preventive guidelines: A comprehensive review. Osong Public Health and Research Perspectives. 2021; 12(6):346-60. [DOI:10.24171/j.phrp.2021.0180] [PMID] [PMCID]
- [7] Maleki Roveshti MM, Zaveh ZG, Kamali M, Arefi MF, Hami M, Elham S, et al. Study and comparison Iranian preventive behaviors of COVID-19 Outbreak: A two-year experience (2020-2021). Journal of Research in Environmental Health. 2022; 8(1):83-90. [Link]
- [8] Cambridge Advanced Learner's Dictionary & Thesaurus: Definition of observance. Cambridge University Press.
- [9] Shafiee-Kandjani AR, Alizadeh M, Nasirzadehghan A, Kehtary-Harzang L, Vahedi M, Poursadeqiyan M, et al. Socioeconomic status and dimensions of mental health with suicidal ideations among students. Iranian Journal of Public Health. 2021; 50(10):2158-60. [Link]
- [10] Kabamba Nzaji M, Ngoie Mwamba G, Mbidi Miema J, Umba EKN, Kangulu IB, Ndala DBB, et al. Predictors of nonadherence to public health instructions during the COV-ID-19 pandemic in the democratic republic of the Congo. Journal of Multidisciplinary Healthcare. 2020; 13:1215-21. [DOI:10.2147/JMDH.S274944] [PMID] [PMCID]
- [11] Graham A, Cullen FT, Pickett JT, Jonson CL, Haner M, Sloan MM. Faith in Trump, moral foundations, and social distancing defiance during the coronavirus pandemic. Socius. 2020; 6:2378023120956815. [DOI:10.2139/ssrn.3586626]
- [12] Naghavi S, Mehrolhassani MH, Nakhaee N, Yazdi-Feyzabadi V. Effective factors in non-compliance with therapeutic orders of specialists in outpatient clinics in Iran: A qualitative study. BMC Health Services Research. 2019; 19(1):413. [DOI:10.1186/s12913-019-4229-4] [PMID] [PMCID]
- [13] Dehvan F, Baghi V, Lotfi A, Ghanei Gheshlagh R. [Medication adherence inhibitors and facilitators in type 2 diabetic patients: An integrative review (Persaian)]. Scientific Journal of Nursing, Midwifery and Paramedical Faculty. 2017; 3(1):1-17. [DOI:10.29252/sjnmp.3.1.1]
- [14] Khajehnasiri F, Zaroushani V, Poursadeqiyan M. Macro ergonomics and health workers during the COVID-19 pandemic. Work. 2021; 69(3):713-4. [DOI:10.3233/WOR-210412] [PMID]
- [15] Marashi SA. [The phenomenon of "adherence" to health advice in the corona epidemic (Persaian)]. Public Relations Report of Shahid Chamran University of Ahvaz, March 1, 2020. https://scu.ac.ir/fa/article/4393500
- [16] Connelly LM. Trustworthiness in qualitative research. MEDSURG Nursing. 2016; 25(6):435-6. [PMID]
- [17] Mir Jahanian SM: [The problem of compliance with health protocols in arcades and bakeries in Isfahan (Persian)] [Internet]. [Cited 2020 Oct 31]. Available from: [Link]
- [18] Mohammadi N, Akbari M, Khoshnavaz A, Aghamolaei T, Peiman N, Lamieyan M, et al. [Comprehensive health education curriculum (introduction to practical concepts) spe-

- cial for health education experts (Persian)]. Tehran: Mehr ravash; 2009. [Link]
- [19] Branden N. Psychology of self-respect [J. Hashemi, Persian trans]. Tehran: Sahami Enteshar Inc; 1992. [Link]
- [20] Irvani M, Khodapanahi MK. [Psychology of sensation and perception. 10th Tehran: SAMAT Publication; 2021. [Link]
- [21] Allahverdipour H. [Global Health Communication Challenge: Infodemi in the Coronavirus disease pandemic (covid-19) (Persiian)]. Journal of Education and Community Health. 2020; 7(2):65-7. [Link]
- [22] Hadizadeh Moghaddam A, Rezaeian A, Tabarsa G, Raminmehr H. [Developing the CWB's model based on theory of planned behavior; (A personality traits approach) (Persian)]. Quarterly Journal of Public Organizations Management. 2014; 2(3): 65-88. [Link]
- [23] Abolghasemi A, Brahmand O, Kiamarsi, A. [Psychology in society: How to interact with each other? (Persian)]. Ardabil: Rahrodanesh Publications; 2005. [Link]
- [24] Fars news agency. How did Singapore succeed against Corona? [Internet]. [cited 2020 Apr 17]. Available from: [Link].
- [25] Farshchi Tabrizi Y, Hadianfard H. [A survey on traffic behavior of Shiraz citizen during urban traffic (Persian)]. Journal of Police Medicine. 2016; 5(3):213-22. [Link]
- [26] Glanz K, Rimer BK, Viswanath K. Health behavior and health education: Theory, research, and practice. Hoboken: John Wiley & Sons; 2008.
- [27] Mirzaei E, Ahamadi Y, Bokharaie A, Nayebi H. [Lawless-ness and Social Connections (case study: Ahvaz) (Persian)]. Journal of Cultural Sociology. 2017; 8(3):97-123. [Link]
- [28] Durkheim, E. The division of labor in society [B. Parham, Persian trans]. Tehran: Nashr Markaz; 2002. [Link]
- [29] Kahan DM. Misconceptions, misinformation, and the logic of identity-protective cognition. Cultural Cognition Project. 2017; 164:1-9. [DOI:10.2139/ssrn.2973067]
- [30] Krishna PR, Undela K, Palaksha S, Gupta BS. Knowledge and beliefs of general public of India on covid-19: A webbased cross-sectional survey. medRxiv. 2020; 1-19. [DOI:10. 1101/2020.04.22.20075267]
- [31] Kafashi M, Azadeh N. [Social factors affecting the level of social trust among faculty members (Persian)]. Social Science Research Journal. 2009; 3(1):89-115. [Link]
- [32] Diana K. Sociology in our times: The essentials [F. Hemmati, Persian trans]. Tehran: Jame'shenasan Publishing; 2013. [Link]
- [33] Coulson NS, Ferguson MA, Henshaw H, Heffernan E. Applying theories of health behavior and change to hearing health research: Time for a new approach. International Journal of Audiology. 2016; 55(Suppl 3):S99-S104. [DOI:10. 3109/14992027.2016.1161851] [PMID]
- [34] Sacks E, Alva S, Magalona S, Vesel L. Examining domains of community health nurse satisfaction and motivation: Results from a mixed-methods baseline evaluation in rural Ghana. Human Resources for Health. 2015; 13:81. [DOI:10.1186/s12960-015-0082-7] [PMID] [PMCID]

- [35] Fiscella K, Franks P, Gold MR, Clancy CM. Inequality in quality: Addressing socioeconomic, racial, and ethnic disparities in health care. Journal of the American Medical Association. 2000; 283(19):2579-84. [DOI:10.1001/jama.283.19.2579] [PMID]
- [36] Rubio-Valera M, Pons-Vigués M, Martínez-Andrés M, Moreno-Peral P, Berenguera A, Fernández A. Barriers and facilitators for the implementation of primary prevention and health promotion activities in primary care: A synthesis through meta-ethnography. Plos One. 2014; 9(2):e89554. [DOI:10.1371/journal.pone.0089554] [PMID] [PMCID]
- [37] Shoarinejad A. Developmental psychology. Tehran: Etelaat Publications; 1999. [Link]
- [38] Robbins S. Organizational behavior: Concepts, theories, and applications [Parsaian A, Arabi M, Persian trans]. Tehran: Daftar Pazhouheshhaye Farhangie; 2010. [Link]
- [39] Heidarnejad A. [A study of risky driving in Zahedan and the factors affecting it (Persian)]. Rahvar Research Studies. 2018; 7(26):183-208. [Link]
- [40] Karimi Y. [Social psychology (Theories, Concepts, and Applications) (Persian)]. Arasbaran Publication: 2022. [Link]
- [41] Rashidpour A, Aghasi S. [Cultural capacity making, the key factor in the direction of cultural and political development (Persian)]. Political and International Scientific and Research Quarterly. 2011; 3(9):131-9. [Link]
- [42] Afshar M. Psychological study of community members in the corona virus crisis How to spark Enlighten the consciousness of persons? Young Journalists Club. October 10, 2016.
- [43] Epress Tribune. UAE announces \$5,500 fine for spreading unauthorised coronavirus information; The Epress Tribune. 2020 April 18. [Link]
- [44] Masoudnia E. [Investigating the relationship between the norm of social interaction and lawlessness of motorcycle users in Yazd (Persian)]. Applied Sociology. 2014; 5(2):139-58. [Link]
- [45] Mirfardi A, Faraji F. [A Study of Tendency toward Law-Breaking and its Relationship to Social Participation and Social Control in Yasouj (Persian)]. Journal of Applied Sociology. 2016; 27(2):93-110. [DOI:10.22108/JAS.2016.20493]
- [46] Feiz Arefi M, Delshad MH, Babaei Pouya A, Abdollahi M, Kamali M, poursadeghiyan M. Psychometric properties of coronavirus infection risk perception questionnaire with a working life approach. AOH. 2022; 6(2):121-17. [Link]
- [47] Nemati Dopolani F, Arefi MF, Akhlaghi E, Ghalichi Z, Salehi AS, Khajehnasiri F, et al. Investigation of occupational fatigue and safety climate among nurses using the structural equation model. Work. 2022; 72(3):1129-39. [DOI:10.3233/ WOR-213648] [PMID]
- [48] Motta M, Stecula D, Farhart C. How right-leaning media coverage of COVID-19 facilitated the spread of misinformation in the early stages of the pandemic in the U.S. Canadian Journal of Political Science as part of the Cambridge Coronavirus Collection. [Link]

