Analyzing People's Behavioral Patterns during the Covid-19 Pandemic Using the Lived Experiences of 4030 Call System Experts: A Qualitative Study

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ABSTRACT

Aims Covid-19 is a new disease that threatens public health. To combat this disease, the first step is to recognize the behavioral categories of people and their reactions, then provide solutions to improve people's preventive behavior. This study aimed to investigate the behavioral patterns of people using the lived experiences of experts in the 4030 call system.

Participants & Methods In this qualitative research, data were collected from the lived experiences of experts in the 4030 call system by purposeful snowball sampling to achieve theoretical saturation through semi-structured interviews. Ultimately, the codes were converted into categories and sub-categories using MAXQDA 11 software.

Findings After analyzing people's behavior, in addition to some appropriate behaviors, seven inappropriate behaviors were found, including reckless behaviors, inappropriate responses to fear and stress, indifference and negligence, creating family tension, obsession, and rejecting the sick or recovered patients. The solutions found in dealing with the different inappropriate behaviors of people are as follows: recognizing the cause of behaviors, education and counseling, policymaking and planning simultaneously with proper management, trust-building, monitoring and follow-up, and making laws by taking into account the implementation of Covid-19 prevention protocols.

Conclusion Individuals had different behaviors at the time of the Covid-19 pandemic, many of which were improper and led to problematic circumstances. The strategies proposed by 4030 call system experts include a proper understanding of the behaviors and their causes, policymaking, planning and enforcing laws appropriate to the challenges ahead, and face-to-face or virtual counseling and training.

Keywords Counseling; Covid-19; Dangerous Behaviors; Pandemics

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Introduction

In December 2019, a new variation of coronavirus was reported in Wuhan, China, which gradually spread to different parts of China, and then in March 2020, it became a global pandemic [1]. The announcement of the coronavirus as a global pandemic by the World Health Organization raised the concern and anxiety of people at risk of the virus. Unlike infections such as the flu and other diseases, media coverage highlighted Covid-19 as a unique threat, causing panic, stress, and mass hysteria [2] in a way that dramatically changed all aspects of people's daily life. There was no approved drug or vaccine at the time to treat this disease, so the only way to prevent the spread of the disease was to quarantine the infected people [3].

Quarantine and prevention of this emerging disease required a combination of strong governance, the use of existing and innovative technologies, strong community participation, and self-isolation [3]. Different countries adopted different management styles due to different psychological influences and cultures. For example, some countries first recommended new policies to local medical institutions. One such policy was that people with milder symptoms should stay at home and rest and not seek medical help from clinics or hospitals. The policy also advised people at higher risk of infection, including the elderly and patients with chronic illnesses, to avoid visiting the hospital for non-medical purposes. Then, the new policies allowed public medical centers to increase the admissions of infected patients in areas with a high prevalence of Covid-19 and to test patients with suspected infections in specialized clinics to prevent transmission. Lastly, they urged all people to travel less and those with cold symptoms to avoid leaving home. Government officials encouraged companies to allow employees to work from home during off-peak hours [1, 4].

Differences in the behavior of people in different countries during the Covid-19 pandemic are understandable, as countries differ in their medical systems in the availability of personal protective equipment, work conditions, and quarantine policies. They also differ in the general conditions of living and the way that information is spread on mainstream and social media during a pandemic. Because human behavior has a very important role in the spread of COVID-19, and the actions of individuals, groups, countries, and international institutions all play a role in curbing its spread; insights into social behaviors become invaluable during a pandemic [5].

Also, during a pandemic such as COVID-19, which threatens millions of lives, changing people's behaviors in a way to prevent the spread of the disease is a moral imperative [5]; therefore, it is of benefit to identify useful predictors of mental health and behaviors in different countries during the Covid-19 pandemic [6]. At present, considering the pandemic situation of coronavirus, which affects almost all aspects of life [7], it seems that by carefully examining and analyzing people's behaviors and utilizing appropriate strategies and techniques, the quality of life of people can be improved [8-10]. To achieve the desired results, the medical staff can be the most helpful; because one of the important tasks of the medical staff is to advise and educate people in society.

Telephone consultation is very important in health care providers due to the faster and easier access for patients and potential cost savings [11]. A study was conducted in Oman that interviewed several doctors who had consulted their patients over the telephone (to maintain social distancing) during the Covid-19 pandemic and concluded that telephone consultation during these times could have limitations such as insufficient technical support and uncertainty about privacy and confidentiality of communication, but at the same time, it has many benefits [12]. Another study conducted by Glatman *et al.* showed that telephone consultations during the Covid-19 pandemic were a facilitated way of communication with the people. Doctors, nurses, and clinic managers answered people's questions through this telephone consultation. The results of their investigation showed that the most questions people asked were about home quarantine, symptoms of the corona virus and travel restrictions. They finally concluded that in such cases, telephone counseling can be the best way to address people needs [13].

In Iran, in early March 2020, after the announcement of the first Covid-19 infections in the country, a coronavirus counseling system was established by the Executive Headquarters of Farman Imam in cooperation with the Ministry of Health. The public were provided with the telephone number "4030" and were invited to call this number to get advice on Covid-19. They also invited all medical staff to join the project to advise and educate the public by providing information that they already knew plus a range of new information that was made available to them in various ways (including cyberspace). But was this training enough for the emerging coronavirus disease? And were people's reactions to the disease differs from one another? What experiences did the experts who took on these tasks gain? And how can these experiences be used in the future? What solutions do they suggest for dealing with people's behavioral problems?

What is certain is that in order to give advice and education to people in society, it is necessary to know the behavior of people dealing with the outbreak of a new disease and provide the necessary solutions. Given the rapid spread of the disease and the lack of research in this area, it seems conducting a research to help identify how people react to the spread of the disease, and how to advise and educate people in

such cases is necessary and also inevitable.

Since Covid-19 is a newly emerging virus and people's reactions and behavior patterns are unknown, knowing these behavior patterns is very valuable and can be useful for decision-makers and policy makers of the health system. The experts in the 4030 call system were among the first to communicate directly with the public. Their valuable experiences can help significantly in this subject. This study aimed to analyze the behavioral patterns of people during the outbreak of Covid-19 using the lived experiences of experts of the 4030 call system to provide useful solutions to the medical staff to deal with such diseases.

Participants and Methods

Study design and setting

The following study is a qualitative study with a content analysis approach. Its purpose is to analyze people's behavioral patterns during the outbreak of Covid-19, using the lived experiences of the experts in the 4030 call system from June to November 2021. Content analysis is a method for analyzing text, audio, and video communication messages, which we can use to understand social life. The research population was medical staff experts who gave advice and training to the people who called through the 4030 call system.

Data collecting method

Data were collected by purposive snowball sampling to achieve theoretical saturation through semi-structured interviews. The inclusion criteria were cooperation with the 4030 call system from the beginning and completion of the consent form. The sample collection steps were as follows:

The experts of the 4030 call system were contacted and the objectives of the study were explained to them and after obtaining their permission and consent, the interviews took place at their desired location or over a phone call, each lasting about 45 to 60 minutes.

At the beginning of the interview, after learning about the demographic characteristics of individuals, according to the purpose of the study and the research questions, a general question was asked (for example, "What were the behavioral categories and reactions of the people to the outbreak of Covid-19?" or "What strategies do you recommend for improving preventive behaviors?"), and the interview continued with more questions, which were based on the answers given to the questions. The questions included: "Can you explain more?" or "What do you mean by that?"

At the end of the interviews, all of them were transcribed. Coding was done using content analysis, and then the obtained codes were analyzed. To ensure the validity of the research, the extracted data were peer-reviewed, and the data extracted from the participants were also reviewed by the participants themselves. Intercoder reliability method was also used. Finally, themes were extracted, and solutions to deal with such diseases were suggested.

Data analysis

The qualitative content analysis method and MAXQDA 11 software were used for data analysis. First, the interviews were fully recorded and then the recordings were transcribed on the same day and read in full to understand the main theme. The interviews were then read line by line and analyzed. After several revisions, the written texts were divided into constituent semantic units, and then the codes were converted into categories, and the first categories were formed. And finally, all the major categories and their sub-categories were saturated. That is until no new information could be extracted from the data. The schematic relationship between codes, categories, main components, and sub-components is shown in Figure 1.
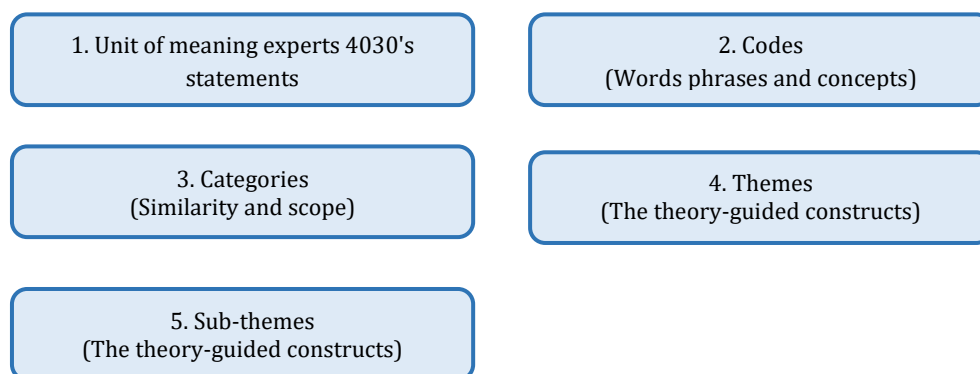
1. Unit of meaning experts 4030's statements	2. Codes (Words phrases and concepts)
3. Categories (Similarity and scope)	4. Themes (The theory-guided constructs)
5. Sub-themes (The theory-guided constructs)	

Figure 1) A schematic relationship between the codes, categories, sub-themes, and themes

Findings

The participants were 11 experts in the 4030 call system. 5 were female, and 6 were male, with an average age of 26.5 years. One of the important features observed in the demographics of the interviewees was the diversity of the field of study,

which included the fields of nursing, midwifery, operating room, medicine, and health. Their common feature was working as a 4030-system expert, jihadist.

Initially, 516 primary codes were extracted. These codes were then summarized and classified based on conceptual similarities and differences. Lastly, they were divided according to specific goals (1. Recognition of behavioral categories and reactions of people during the outbreak of coronavirus. 2. Identification of appropriate solutions for dealing with different behaviors of people during the outbreak of Covid-19).

After analyzing the data obtained from the interviews, 5 main categories and 23 sub-categories were obtained.

In response to question 1 (What were the behavioral categories and reactions of the people to the outbreak of Covid-19?), the experts of the 4030 call system named two categories: "Appropriate behavioral categories" and "Inappropriate behavioral categories".

• Appropriate behavioral categories
This is the behavioral category of those who knew and followed the appropriate protocols during the Covid-19 pandemic, such as washing hands after entering the house and before eating any food, disinfecting surfaces, wearing masks when leaving the house or attending meetings, and practicing social distance.

Sample: "In earlier days, people would call and ask for preventive measures. For example, some asked how to disinfect surfaces. Or where to put a mask" (58-year-old woman).

• Inappropriate behavioral categories
For the inappropriate behavioral categories, seven intrapersonal factors were identified in society. These factors include the following:

1. Reckless behaviors: such as taking some drugs on their own, burning Donkey Dung (Anbar-Nesara), drinking liquor and giving it to children, drinking alcohol, smoking opium, eating bleach (sodium hypochlorite), and fear of going to the hospital.

Sample: "Or they were wrapping themselves in blankets, turning on the heater, and so on because they had heard that the heat destroyed the coronavirus. In some cases, they even got dehydrated" (20-year-old man).

2. Creating family tension: Participants believed that during this period sometimes family conflicts would happen.

Sample: "For example, many people said that my partner did this, did that, calls me names, I do not have these symptoms, I've been stressed for days now, and this thing has been going on; what should I do? After I talk to them, they calm down and thank me very, very much" (23-year-old woman).

3. Excessive obsession: Participants cited obsessive-compulsive disorder as another example of inappropriate behavior patterns.

Sample: "For example, someone said that they were obsessed with cleaning too much and said that I wash the potatoes and onions I have bought with bleach and soap" (23-year-old woman).

4. Indifference and negligence: One of the other points mentioned by participants for misbehavior was indifference and negligence toward Covid-19, which could cause the virus to spread more in society.

Sample: "In my personal experience, with those around me, I saw that they were very relaxed. They said that we won't get corona. Even though they saw it with their own eyes, they still did not believe it" (24-year-old woman).

5. Rejecting the sick or the recovered patients: Participants noted that some individuals blamed those who got the coronavirus disease and tried to exclude them. Because of this, some people hid their infection.

Sample: "People saw, for example, that when a person got the coronavirus disease, it was as if they had been shunned. Some people tried to hide it. Some people, for example, looked down on someone who got infected. Well, this is a virus, it's not their fault. It is possible, for example, that a person uses public transportation and gets infected, and gets shamed like this" (22-year-old man).

6. Inappropriate responses to fear: Another example of inappropriate behavioral patterns was fear. Participants believed that fear of infection led to panic, disrupting normal life, and it even influences the decision to seek treatment or continue the treatment.

Sample: "Some people were apparently very scared. Of course, they are scared now too. They are terrified when the name of this virus comes up" (25-year-old woman).

7. Inappropriate responses to stress: The participants believed that some people show inappropriate reactions due to stress.

Sample: "Some people were stressed, for example, someone said that my father got corona, and we took him to the hospital. Should we go visit him now or not?"

In response to question 2 (What are the appropriate solutions for dealing with different behaviors of people during the outbreak of Covid-19?), the experts participating in the research suggested to know the cause of inappropriate behavior, adopt appropriate policies and provide appropriate training based on it.

• Causes of inappropriate behavior
Regarding the causes of inappropriate behavior, participants stated that the causes of inappropriate and improper behaviors of people were weariness, normalization, resistance to change, having incorrect and insufficient information. They believed numerous factors affect the inappropriate behavioral patterns of individuals during the Covid-19 pandemic.

Sample: "I don't think there is just one single factor. It's one of the cases in which several factors affect the outcome (26-year-old man)".

Weariness and normalization: The participants believed that when people continue with a lifestyle, after a while, this lifestyle becomes boring and normal for them. To prevent people from getting bored you have to choose and suggest different methods.

Sample: "When you implement a single method, it becomes normal and repetitive after a while. I think if different methods are used, it can be effective" (26-year-old man).

Resistance to change: The participants believed people usually resist change. And because their lifestyles changed during the Covid-19 pandemic, they are trying to resist it.

Sample: "Those who had lived freely for many years now faced limitations. They were not ready to accept such a thing at all" (22-year-old man).

Having incorrect and insufficient information: The participants believed that having incorrect and insufficient information is another cause of inappropriate behavioral patterns. This can be formed from false beliefs or through contradictory news and different opinions of experts.

Sample: "Some people are affected by those currents of thought. And we have to see the cause behind it. Now and then a message comes that says, this virus has such a deadly effect, it does this and that, be very careful, some university professor has said this, and because of this the educated community also becomes worried" (26-year-old man).

• Policymaking

The experts participating in the study suggested proper policy-making strategies to prevent Covid-19's spread and as a way to encourage people to follow health guidelines. To make this method practical, centralized management, trust building, planning, and enforcing the law were proposed.

Centralized and unified management: Participants believed proper policymaking requires unified management, and when unified management is not in charge, we will not achieve the goal.

Sample: "What we saw was that there was no unified management. It was as if everyone was a chef working on their own. A single system that gathers all the resources in one place and tells them what to do (is required). Everyone was separate from everyone" (22-year-old man).

Trust-building: Participants stated that they need to trust policymakers to adopt good policies and that people follow the policies adopted and instructions given during the pandemic.

Sample: "Another thing that is also influential is the government. People need to have faith that the information they are being given is true and that no one is going to deceive them". "Maybe if at first, the trust was greater, the virus would not have spread so much" (26-year-old man).

Planning: The experts believed that in order for us to achieve our goals of controlling and preventing the spread of coronavirus disease, we need to plan carefully and know what our goal is and what we want to achieve.

Sample: "Because there is no planning, because you know, we each have to proceed according to a scientific plan; let's say, for example, a country has done something in a situation like ours, let us ourselves try it" (51 - year - old woman).

Legislation: The participants suggest that in order to implement the necessary guidelines in the society, it is necessary to formulate laws that have a guarantee of implementation.

Sample: "Law must be implemented. Behavior does not improve unless law is enforced, and they must be afraid of a law and the possibility of a fine, especially the retailers, sellers, hairdressers, and administrative departments. When there are no penalties, there won't be any changes" (35-year-old woman).

• Education

Another solution that participants suggested to improve inappropriate behaviors and prevent the spread of the virus during the Covid-19 pandemic was education.

Example: "The cause of inappropriate behaviors should be determined, it can be said that these behaviors were caused by incorrect teachings. Proper education should be determined to prevent inappropriate behaviors and their complications" (51-year-old woman).

The participants also emphasized that depending on the conditions, different methods, such as face-to-face or virtual can be used for counseling and training.

Example: "These training should be continued in different ways. We can use face-to-face or virtual training" (26-year-old man).

A summary of the results and the framework of the behavioral categories and subcategories are shown in Table 1.

Table 1) Categories and subcategories of people's behavioral framework and suggested solutions to deal with different people's behaviors from the perspective of 4030 system experts during the outbreak of Covid-19

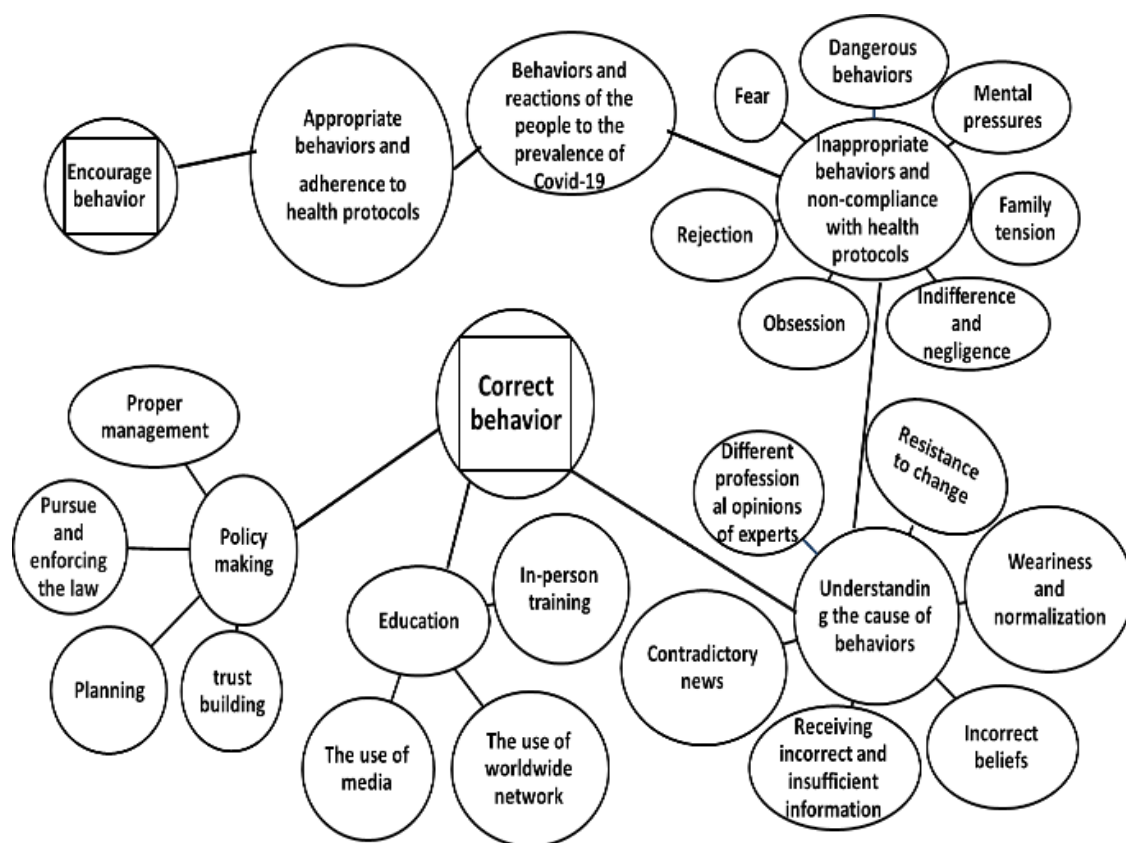| Sub-categories	Categories
People's behaviors and reactions to the outbreak of Covid-19	
Disinfection of surfaces	
Washing hands	
Putting on mask	Appropriate behaviors and adherence to health protocols
Social distancing	
Reckless behaviors	
Inappropriate responses to stress	
Creating family tension	
Indifference and negligence	Inappropriate behaviors and non-compliance with health protocols
Obsession	(intrapersonal factors)
Rejecting the sick or the recovered patients	
Inappropriate responses to fear	
Suggested solutions to deal with different behaviors of people during the outbreak of Covid-19	
Resistance to change	
Weariness and normalization	
Incorrect beliefs	
Receiving incorrect and insufficient information	Understanding the cause of behaviors
Contradictory news	
Different professional opinions of experts	
Proper management and trust building	
Planning	
Pursue and enforcing the law	Policy making
In-person training	
The use of worldwide network	Education
The use of media	

Figure 2) Proposed model for people's behaviorsduring the Covid-19 Pandemic

A proposed model for people's behaviors during the Covid-19 pandemic was obtained (Figure 2).

Discussion

This study was conducted to identify the behavioral categories and people's reactions during the outbreak of Covid-19, as well as strategies to deal with inappropriate behaviors and their challenges. The experts participating in this study mentioned seven intrapersonal factors in individuals of the society, which they faced during the pandemic. These factors were reckless behaviors, inappropriate behavioral reactions to fear and stress, indifference and negligence, creating family tension, obsession, and rejecting the sick or recovered patients.

The leading factor among them was inappropriate behavioral reactions to fear and stress. A closer look at the researchers' findings shows that inappropriate reactions to fear of coronavirus were an important factor in the outbreak of the disease, which caused people to do many different things to prevent complications. Some people engaged in dangerous behaviors because they were unfamiliar with the disease and the means to prevent it, including taking drugs that seemed helpful to them, burning donkey dung (Anbar-Nesara), drinking liquor and giving it to children, drinking alcohol, smoking opium, and drinking bleach.

Considering the condition of the Covid-19 pandemic, which has affected and paralyzed almost all aspects of life, the discussion of the psychological effects of this disease on the mental health of people at different levels of society is vital [14, 15].

One of the natural emotional reactions during a pandemic is fear. Anxiety and fear are common symptoms in patients with respiratory disorders. It can significantly reduce the quality of different aspects of the life of the patients. The Covid-19 pandemic has caused significant anxiety and fear among people around the world [16].

Pakpour and Griffiths believe that fear assessment is very important, and without knowing the level of fear toward Covid-19 among different groups, it is difficult to realize if educational programs for prevention are needed and if they are, which groups should be the target. They believe that by collecting and using such data, targeted training programs can be designed to overcome the fear of Covid-19 and to help frightened individuals [4].

Negative emotions from threats can be contagious, and fear can make threats feel more immediate [17]. Murthy *et al.* showed that during therapy, targeting fear may be helpful in some cases but not in others. Resorting to fear causes patients to behave appropriately if they feel able to deal with the threat, but if they feel unable to deal with it, it leads to

defensive reactions [18]. The results of Shereen *et al.*'s research also show that if we can eliminate intense fears of people, the most changes to the behavior of people can be made. But we might face another challenge, which is when people show excessive optimism [19]. This optimism can lead to them ignoring public health warnings [20]. Thus, communication strategies must strike a balance between excessive fear and optimism without creating excessive feelings of anxiety and panic. Also, if people are overly pessimist, they express emotions that may have outcomes such as rejecting the infected people and having negative attitudes toward them [21].

One of the objectives of this study was to investigate the proposed appropriate solutions to deal with the different behaviors of people during the outbreak of Covid-19. Experts participating in this study believed that to improve these behaviors, first, the cause of inappropriate behaviors must be identified, and based on that, appropriate policymaking and proper education should be done in society.

This study obtained the causes of inappropriate behaviors of people, which include incorrect beliefs, resistance to change, receiving incorrect and insufficient information, weariness and normalization, contradictory news, and different opinions and beliefs of experts.

Significant changes in behavior are required during pandemics, and various social and cultural aspects affect the extent and speed of this behavior change [17]. Sometimes the media only report the number of people killed and injured, as opposed to the number of people who recover or only experience mild symptoms. This might increase negative emotions and the likelihood of people being a danger to themselves or others. Therefore, it is necessary to determine through research whether a positive framework can eliminate negative emotions in people in addition to increasing the appropriate public health behaviors [22]. However, some believe that in times of distress, people act selfishly and endanger the lives and health of others to ensure their survival. But cooperation and orderly behavior are common in a wide range of emergencies and disasters, and there are many cases where people show significant altruism [23].

Behavior change at the individual level is challenging, and it is difficult to change behaviors that have become a habit. But sometimes the cause of this difficulty is not knowing the right way to do it. Depending on the desired behavior and the relevant conditions and issues, the method of change should be altered. Currently, efforts in prevention of Covid-19 are largely dependent on individual-level behavioral changes, such as self-quarantine and social distancing. Having information, motivation, and behavioral skills are key factors in initiating behavioral changes, but if individual categories are the only categories that are addressed, they are

unlikely to be sufficient for a lasting change [24]. To rephrase it, interventions to change behavioral patterns can have a fundamental effect on reducing the risk and outcome of the disease, but other factors must be addressed.

Another issue raised by the experts of the 4030 system was having incorrect and insufficient information, which could be caused by wrong beliefs, or they may have been obtained from different opinions of different experts. Cucchiarini *et al.* believe that it is advantageous to know which source is most effective in conveying a particular message. In addition, it is important to know how the message should be presented, what the relationships between the messages are, what the sources are, and what the purposes of those messages are [25].

Researchers believe that human behavior has been instrumental in the development of the Covid-19 pandemic, and the actions of individuals, groups, countries, and international institutions all play a role in curbing its spread. It is important to look at human behavior to understand both the systemic causes of the Covid-19 pandemic and how we can reduce its effects. Now and in the years following, we can shape or transform the world we live in. In the meantime, if this issue is normalized, it may have harmful consequences [6, 17].

The participants consider proper management and policymaking as key factors in people's behavior. They believe that in order for people to choose the right behavior, which we expect from them, they should first trust the government and policymakers. Also, proper management and trust building and centralized and unified management were considered as important factors for success in policymaking.

Shaw *et al.* attribute the success of the Korean government in controlling Covid-19 to the government's transparency in disclosing accurate information and centralized and integrated decision-making for quarantine and disease management. They state that the preparation and implementation of a comprehensive plan by a team of experts are essential and an effective response to a new infectious disease such as Covid-19 requires highly specialized knowledge and expertise. So, it is essential that a team of experts prepares and implement a program [1].

Additionally, the experts in this study believe that to achieve our goals of controlling and preventing the Coronavirus disease, we need targeted planning. In different countries, depending on the culture and activities of that country, different solutions were provided to control the Covid-19 pandemic, including distance education, online classes, etc. [1].

The experts participating in the study also believe that sometimes to be able to get people to take proper action in disease prevention, appropriate policies and planning are required.

The issue of law and maintenance of people's health

has always been one of the most important goals of governments, and law enforcement is the primary tool through which governments can improve conditions for a healthier and safer lifestyle. The development and implementation of legal frameworks can expand the effective range of public health strategies and provide valuable tools for the medical staff [26, 27].

Marks-Sultan *et al*. also see the law as an important tool in promoting and supporting health. They state that the issued health laws and policies lead to a strong health infrastructure in every country. These strong infrastructures are the most effective strategies to prepare countries for health emergencies [28].

Despite these issues and the acknowledgement of the importance of legislation to promote public health, some researchers believe that the importance of legislation and regulation, and the effectiveness of government interventions are often not well understood. It is also a question for policymakers, whether legal interventions are effective and what would be the cost of it, both socially and economically. If legal interventions end up being too expensive, they can reduce the resources spent on them to be put in more effective ways.

Another solution suggested by the study participants to improve inappropriate behaviors during the Covid-19 pandemic was education. They also stressed that for counseling and training, depending on the situation, different methods can be used, such as face-to-face or online training.

Other researchers also believe that developing educational programs for target groups in the current situation is a necessity to improve behaviors. The goal of education during the pandemic is to reduce anxiety and despair and to reach a wider audience social media, and religious leaders can be utilized [4, 17, 29, 30].

This study has three main limitations:

1. Due to the emerging nature of this disease, there were very few similar studies in this field; as a result, there were various problems at different stages of design and implementation.

2. According to the type of study conducted, the population under study is inevitably limited; therefore, generalizing study results should be done with caution.

3. It seems that some cultural considerations can prevent the accurate transmission of lived experienced findings by the participants and affect the research results to some extent.

It is suggested that the following topics be investigated in future research:

1. The impact of the media on people's behavior
2. The impact of preventive policies on people's inappropriate behavior
3. The extent of the role of leaders of different communities in health behaviors

4. Checking people's satisfaction with telephone counseling

Conclusion

Covid-19 is the new disease of the century, and all of its aspects are unknown to experts and policymakers. To deal with this disease and prevent its further spread, we need the cooperation of the public. Therefore, before taking any action, we must be able to identify the behavioral categories of the people and their reactions during the outbreak of this disease; then, in addition to proper training and counseling, we need to make appropriate plans based on them to prevent inappropriate behaviors in such cases. In this regard, the individuals from whom we can get enough information are those who had the most contact with the people in this period, have witnessed the different behaviors of people, and are fully acquainted with this disease, its complications, and its methods of prevention.

After recognizing the cause of inappropriate behaviors, it is possible to plan correctly in social and educational policies. For this purpose, in addition to preparing a comprehensive training program, the relevant departments and ministries must examine social and cultural factors and their effects on public health and create appropriate laws to prevent individuals or even institutions that disrupt social health from continuing to work.

On the other hand, because this task is usually the responsibility of the medical staff, they should be responsible for the role of counseling and education to prevent harm to society. Therefore, medical staff should be trained on this important issue.

Understanding behaviors, and their contexts, like the causes of different behaviors, can control a pandemic in a variety of ways. If the authorities and the experts properly educate the public about the appropriate behaviors and have a good relationship with people, they can benefit from the help of the general public. Because in all events, it has been observed that people spontaneously and voluntarily help to reduce complications.

interests that may create a conflict of interest about the submitted article.

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