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Original Article

The Reasons for Avoidance of Wearing a Face Mask by Some People During COVID-19 Outbreak: A Qualitative Study

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Abstract

Background and aims: Since one of the most important methods of preventing the transmission of COVID-19 is wearing a mask, the present research was conducted to clarify the reasons for avoiding wearing a face mask by some people during the coronavirus outbreak.

Methods: This is a qualitative content analysis study. In this study, 45 people from the cities of Evaz, Lar, and Gerash participated and were interviewed. The interview method was semi-structured, and the participants were selected based on purposive sampling. The collected data were analyzed by the conventional approach of the qualitative study.

Results: The participants of this study consisted of 45 individuals. The mean age of the samples was 41.89±12.88 years. A total of 30 themes were extracted during the qualitative content analysis and then divided into 6 categories, including personal, social, cultural, environmental, economic, and physical factors.

Conclusion: According to the findings of this study, the factors influencing the lack of tendency to wear masks by people in the COVID-19 epidemic period are numerous and interact with each other. Therefore, for encouraging people to perform such protective behavior during the coronavirus epidemic, it is necessary to consider individual, social, environmental, economic, and physical factors together.

Keywords: Coronavirus, COVID-19, Qualitative research, Iran, Face

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Introduction

COVID-19 is a serious threat to public health and has become a global virus pandemic crisis caused by SARS-CoV-2.[1] The main method through which people are infected with SARS-CoV-2 is exposure to respiratory droplets carrying the infectious viruses.[2] The most common symptoms of COVID-19 are fever, cough, tiredness, loss of taste or smell, and loss of appetite, and its less common symptoms are sore throat, headache, aches and pains, diarrhea, a rash on the skin, discoloration of the fingers or toes, and red or irritated eyes.[3] Although the COVID-19 pandemic has significantly affected the health system and the global economy, no definitive cure has yet been found for it. The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) have recommended ways to prevent the transmission of COVID-19. Some of these simple precautions include wearing a mask, maintaining a distance of at least 1 meter (3 feet), avoiding crowds, and constantly cleaning hands with soap and water.[4,5] Countries such as China and South Korea have strongly recommended the use of non-pharmacological health interventions, including the widespread use of face masks, to manage the spread of COVID-19.[6] A study in the south of Iran conducted on 10 440 people showed that in general, about 45.6% of people use masks.[7]

There are two reasons for the effectiveness of face masks: the first one is to prevent the spread of respiratory viruses by carriers, and the second is to reduce the likelihood that the healthy masked person will be exposed to the virus.[8] Therefore, the use of face masks is important for both the virus carrier and the susceptible person to reduce the transmission and spread of the virus. In this regard, an epidemiological study by Zeng et al was conducted to analyze the characteristics of COVID-19 in China, South Korea, Italy, and Spain. Their findings supported

the importance of using masks by people, indicating that using masks in public places leads to a significant decline in daily infections.[9] Ferdous et al also conducted a cross-sectional study to examine the individuals' knowledge, attitude, and practice regarding the COVID-19 outbreak, and 2017 participants completed the questionnaires. The findings indicated that the majority (96.7%) of participants agreed that COVID-19 was a dangerous disease, almost all (98.7%) participants used a face mask in crowded places, 98.8% agreed to report suspicious cases to health authorities, and 93.8% washed their hands with soap and water.[10] Cheng et al examined the effect of using masks in the community to control COVID-19. This study aimed to conduct an epidemiological analysis of COVID-19-confirmed cases in Hong Kong and other countries. This study was conducted from December 31, 2019 to April 8, 2020. Wearing face masks was mandatory during the pandemic in Hong Kong, and the rate of mask usage by the general public was approximately 96.6%. However, wearing a face mask was optional in other countries. The results of this study revealed that the incidence of COVID-19 in Hong Kong was significantly lower than that in countries such as Spain, Italy, Germany, France, the USA, the UK, Singapore, and South Korea.[11] The number of cases and deaths due to COVID-19 in the world is high, and it has made this disease a national and international concern for public health. In these conditions, in addition to treating people with the disease, maintaining public health through infection prevention activities and precautions is necessary. According to the recommendations of the WHO and other health-related organizations and based on the results of various studies, using a face mask to prevent COVID-19 is effective, but there are still people who refuse to wear a mask. In the search conducted by the researchers of this study, no study carried out a comprehensive and in-depth analysis of the reasons for not using a face mask during the COVID-19 epidemic in Iran. In addition, qualitative studies were based on the culture of each community, so finding original findings and planning based on these data necessitated the examination of the views and experiences of different people in the community. On the other hand, in most studies, the greatest focus has been on healthcare personnel, and the challenges of other people in the community have been less studied. Therefore, the researchers decided to study the reasons why some people refuse to wear masks during the COVID-19 epidemic.

Materials and Methods

Type of Study

Among the different types of qualitative research methods, the method of qualitative content analysis was used in this study, and the choice of this method was based on the objectives of the research.

Study Population

The target population in the present study included all people over 18 years old living in Larestan, Evaz, and Gerash, Iran.

Inclusion Criteria

In the present study, researchers made an attempt to examine the causes for and perspectives of people who refuse to wear masks. The inclusion criteria were the desire to take part in the study, residence in one of the three cities of Lar, Evaz, and Gerash, and the ability to share experiences on the causes of unwillingness to wear a mask during the COVID-19 outbreak.

Exclusion Criteria

In case the participants were not willing to continue their participation in the study, they were allowed to withdraw from the study at the beginning or during the study.

Tools

In this study, the semi-structured interview was used to collect the data. The interview with each participant started with warm communication and a clarification of the reasons for the study, proceeded with common and open-ended questions such as "Explain why don't you wear a mask where necessary?", and gradually focused on specific issues.

The researcher used exploratory questions if needed such as "Can you explain more?" or "Can you give an example?" to gather deeper information.

Among the different types of qualitative research methods, conventional content analysis was used in this study, and the choice of this method was based on the objectives of the study. In the qualitative content analysis method, codes are directly extracted from the data. It is also described as an inductive category development. This type of design is usually appropriate when there is a limited theory or research literature on a phenomenon.[12]

Sampling Method

Following the interview process, the researcher summarized the participant's words from time to time in order to show attention to the participant and encourage him/her to express more topics. Further, regarding the questions, as the research progressed in different stages, their form and arrangements were somewhat different, and the researcher was flexible in responding to the different answers of the participants.

After each interview, the interviewer inquired the participants to talk about other vital issues that were not stated during the interview. Moreover, the location of the interviews was selected in coordination with the participants, and the interviews were conducted in accordance with the health protocol of COVID-19. The average duration of the interviews was about 20 minutes.

In this study, the researcher first selected the subjects who were willing to participate in the research and had inclusion criteria (the unwillingness of the participants to continue participating in the research, inability to

understand interview questions related to mental and psychological problems, and inability to speak fluently and clearly) by placing various announcements on social media messengers such as WhatsApp.

Analysis Method

To analyze the obtained data, first, every conducted and recorded interview was typed word by word and then entered into the MAX-Q10 software. Then, each interview was read word by word, and then each text was divided into meaning units. Next, the meaningful units that had close meanings were placed in a group. At last, according to the content and similarities, the main classes were recorded utilizing subclasses.

The general criteria of Lincoln and Guba were utilized to improve the accuracy of the findings.[13] Some measures increased data acceptance in this study, including researchers' long-term involvement with the process of sample selection from different parts of the three cities, data collection and analysis, confirmation of data analysis by research colleagues (peer check), initial review codes by participants (member check), and the presence of an external observer in the interview sessions. In addition, the confirmability of the findings was checked by two external observers familiar with qualitative research.

Ethical Considerations

To increase the consistency and determinability of the data, sampling was done with the maximum difference. Finally, to increase the data transferability, an attempt was made to provide a sufficient description of the data for the critical study of the findings by other researchers.

Results

Forty-five individuals participated in this study. The mean age of the samples was 41.89 ± 12.88 years, and the participants' characteristics are summarized in Table 1.

In the content review, 30 subcategories were obtained which were categorized into six main themes (Table 2). Subcategories were obtained under the title of personal factors which included two subcategories: psychological factors and belief systems.

Table 1. The Participants' Characteristics

Variable	Number	Percent
Age		
<30	9	20.1
30-40	13	28.9
41-50	15	33.3
51-60	4	8.9
61-70	2	4.4
>70	2	4.4
Gender		
Male	25	55.6
Female	20	44.4
Level of education		
Illiterate	2	4.4
Elementary school	6	13.3
High school	7	15.6
Diploma	17	37.8
Academic	13	28.9
Marital status		
Single	6	13.3
Married	39	86.7

Psychological Factors

- *Embarrassment:* A 65-year-old man said, "I am embarrassed to wear a mask. Is the mask like a dress that must be worn? I have not visited a doctor for years, and I have not taken any medication. Do I have to wear a mask now at this age?"
- *Not being afraid of getting COVID-19:* A 27-year-old man said, "They say so much that Corona is dangerous; I don't think it's that much dangerous. Many people took Corona, but it was like a common cold for them. A little fever and body aches that are not scary."
- *The continuous outbreak of coronavirus:* A 42-year-old man said, "Can you tell me when the coronavirus will go away? If it takes a long time, then how long should I wear the mask? I have been wearing a mask for months, and I'm tired of wearing a mask during this time".
- *Having the right to choose:* "I don't want to wear a mask myself. Everyone has the right to choose, and no one should be forced to wear a mask. I am not against wearing a mask, I am against making it mandatory".
- *Negative effect on the beauty of the face:* A 34-year-old woman said, "The mask covers my face, and it is important for me that the beauty of my face is visible. Is it fair to spend a lot of money on facial beauty and then put a mask on my face?" By wearing a mask, I feel that my face will not be visible by others, and its beauty will be lost".

Cultural Factors

- *A sign of weakness in men:* A 32-year-old man said, "It is a weak point for men to get sick by not wearing a mask. A man should be stronger than these events".
- *Wearing a mask is a personal matter:* A 27-year -old woman said, "I think wearing a mask is a personal matter. Everyone has to decide on using it".
- *Loose culture:* A 44 -year -old man said, "These laws related to COVID-19 such as wearing masks in public gatherings are not very useful for Iranian society. Iranian society as a loose society does not care much about the ad hoc laws, and more tolerates the people involved in unusual and abnormal behaviors."
- *Having the right to choose:* "I don't want to wear a mask myself. Everyone has the right to choose, and no one should be forced to wear a mask".

Table 2. Categories and Themes Extracted from the Data

Personal Factors						
Psychological Factors	**Belief System**	**Social Factors**	**Cultural Factors**	**Environmental Factors**	**Economic Factors**	**Physical Factors**
• Embarrassment • Not being afraid of getting COVID-19 • The continuous outbreak of coronavirus • Negative effect on the beauty of the face	• Belief in the ineffectiveness of wearing a mask • Disbelief in the existence of COVID-19 • Belief in the transmission of coronavirus through direct contact • Belief in the adequacy of other health issues • Belief in not being infected with the COVID-19 • Belief in genetic resistance to disease	• To be ridiculed by others • To imitate • Do not take the use of masks seriously • No need for healthy people to wear masks	• Having the right to choose • A sign of weakness in men • Wearing a mask as a personal matter • Loose culture	• Living and working in a wide-open space • The need to use masks in closed and crowded spaces	• Having financial problems • Fear of business slump • A means for some people to get rich • The rarity of the good-quality mask	• Respiratory problems • Foggy Eyeglass and difficulty seeing • Getting COVID-19 before • The tendency to get a coronavirus • Belief in not getting COVID-19 • No serious or chronic illness

Belief System

- *Belief in the ineffectiveness of wearing a mask:* A 33-year-old woman said, "A mask is a piece of cloth, and what can a piece of cloth do? As much as they say, wearing a mask is not effective to prevent coronavirus. Why have there been people who always wore masks but got infected with the coronavirus?"
- *Disbelief in the existence of COVID-19:* A 72-year-old man said, "There is no corona disease. This is the same common cold that patients get better by resting and eating nutritious food. Finally, for some who are infected, this disease turns into a severe form of the disease, namely pneumonia which necessitates them to be hospitalized".
- *Belief in the transmission of coronavirus through direct contact:* A 36-year-old woman said, "I think the coronavirus is mostly transmitted through hand contact than through the air, so I wash my hands regularly and spray alcohol on my hands. That's why I don't need to wear a mask".
- *Belief in the adequacy of other health issues:* A 60-year-old man said, "It is not necessary for me to wear a mask because I rarely leave the house. I also have alcohol spray in my pocket. I do not shake hands with anyone. I do not go to crowded places. If I leave the house, I keep my distance from others."
- *Belief in genetic resistance to disease:* A 37-year-old man said, "So far, no one in my family has got coronavirus. They don't even wear masks, so I think we are genetically resistant to being infected with the coronavirus".
- *Belief in not getting COVID-19:* A 41-year-old man said, "I believe I do not get coronavirus because I have not had any symptoms until now, and my test has been negative twice. This is despite the fact that I have not worn a mask since the outbreak of the disease".

The Subcategories Obtained Under the Title of Social Factors

- *To be ridiculed by others:* A 18-year-old man said, "Every time my friends see that I have put on a mask". He added that they make fun of me and say, "What is this mask that you put on your face? Are you a sissy boy?"
- *Imitating others:* A 40-year-old man said, "I know many of my relatives and friends who do not wear masks. They did not get corona, or if they did, it was not so severe. Even now, you see some people who do not wear masks; similarly, I do not wear masks".
- *Not taking the use of masks seriously:* A 47-year-old woman said, "Neither the government nor the people take wearing masks seriously. For example, if a person does not wear a mask or a shop does not follow the lockdown rules, they will not be dealt with seriously. Finally, the person will be given a warning, or the offending shop may be temporarily closed."
- *No need for healthy people to wear masks:* A 50-year-

old woman said, "I think those who have COVID-19 should wear masks not healthy people because they have the virus in their bodies. Thus, sick people make others sick not healthy people".

The Subcategories Obtained under the Title of Environmental Factors

- *Living and working in a wide-open space:* A 29-year-old man said, "I am a farmer, and now I live on my farm. The farm is an open space, and it is away from the town, so I don't have to deal with sick people. If I have to go to the town, I will do my affairs immediately and return to my farm, so I don't have to wear a mask".
- *The need to use masks in closed and crowded spaces:* A 29-year-old woman said, "The use of a mask should be in a place where there is a large number of people, and the space is closed such as a classroom, mall, or gym. It is not necessary for open spaces such as the street, and even there is no need to wear a mask in solitary places such as at home".

The Subcategories Obtained Under the Title of Economic Factors

- *Having financial problems:* A 48-year-old man said, "Honestly, I cannot afford to buy a mask. Those masks that are of good quality are expensive, and also if I want to buy three or four masks a day for myself and my children, it will cost me a lot".
- *Fear of business slump:* A 39-year-old man said, "I have a retail shop, and my income comes from this shop. This outbreak of coronavirus has reduced my income. Now, if I wear a mask, others will think I have the coronavirus, and they will not want to buy from my shop".
- *A means for some people to get rich:* A 42-year-old woman said, "Why should I wear a mask? Should I pay to buy a mask so that others can get rich? Now not only in pharmacies but in every shop, they sell masks, and some even produce masks just to make money".
- *The rarity of the good quality mask:* A 25-year-old woman said, "Most masks do not have the necessary effectiveness, so it does not matter whether you wear these masks or not. Masks with high quality are rare, and if found, they are expensive and sold in small quantities".

The Subcategories Obtained Under the Title of Physical Factors

- *Respiratory problems:* A 66-year-old man said, "If I put a mask over my nose and mouth, it makes me feel like I can't breathe. It really bothers me when I wear a mask because it's hard for me to breathe".
- *Eyeglass fogging and difficulty seeing:* A 42-year-old man said, "I wear eyeglasses, and wearing a mask causes the steam from my mouth to be directed towards my eyeglasses, and this makes it foggy which makes it difficult for me to see around".
- *Previous infection with COVID-19:* A 33-year-old woman said, "I took the COVID-19 about 4 months ago, and fortunately, it didn't bother me. I am safe now, and I do not need a mask any longer".
- *Tendency to get a coronavirus:* A 25-year-old man said, "Honestly, I want to get COVID-19 so that I can relieve my mind that I have got the coronavirus; therefore, I get immunity against this disease, so I will not need a mask and alcohol or hand washing".
- *Not having a serious or chronic illness:* A woman who was 45 years old quoted, "I thank God that I am healthy. I am not overweight, I do not have diabetes, and I do not have high blood pressure. I have not had a coronavirus yet, so I do not need to wear a mask".

Discussion

A total of 45 participants were enrolled in this study due to the prevalence of coronavirus and qualitative interview research. In Oldmeadow JA, Koch's study, the participants were 20 black and 20 white individuals.[14] However, in the studies where the sampling was in the form of comments, tweets and the number of samples was greater.[15,16] The mean age of the samples was 41.89 ± 12.88 years. In other studies, the highest percentage of participants was between 30 and 50 years old.[17-19] The participation rate of men and women was similar and close to 50%, which was similar to the study by Kwok et al.[17] Most participants (37.8%) had a diploma. In one study, the majority were high school graduates,[20] and in another study, the participants had a bachelor's degree.[18] About 89.7% of the participants were married, which was similar to the study by Soleimanvandi Azar et al.[20]

In this study, subcategories were obtained under the title of personal factors that included two subcategories: psychological factors and belief systems. One of the reasons for not using the mask was an embarrassment. In the study by Ahmad et al, the barriers to the use of face masks were irritation, lack of knowledge, difficulty in breathing, and social embarrassment.[21] Another study showed a similar result for perceived barriers, reporting feelings of shame and lack of comfort for people.[22] For some, mask-wearing can be viewed as a sign of weakness and shame, particularly for men.[23] There was another reason for not wearing the mask which was not being afraid of getting COVID-19. This may be due to a lack of knowledge about the disease that leads to this justification.[21] A systematic review indicated moderate levels of fear of the corona pandemic among about 11 872 college students. Therefore, fear is a protective adaptive emotion in these cases of pandemics.[24] In situations where fear is an inseparable part of a problem, psychological defense mechanisms are activated, which are a set of mental processes that protect against the overwhelming feeling of stress, threatening stimuli that promote mental resilience. People's reactions to stressful situations may fall under one of four types

of defense mechanisms (i.e., pathological, immature, neurotic, and mature), and in many people during the COVID-19 crisis, pathological, neurotic, and immature mechanisms such as denial of reality are activated. In these people, this activation may be manifested by statements such as not being afraid, fearless, and the like.[25] Another reason was the continuous outbreak of coronavirus which caused psychological fatigue. In a study conducted on the COVID-19 pandemic in Istanbul, 3672 people completed the questionnaire, with an age range of under 30 to over 60 years, and 64.1% of participants were categorized as psychologically fatigued.[26] Pandemic fatigue related to COVID-19 is a growing public health concern. In a study in Hong Kong, this fatigue was found to be common and associated with poor mental health, lower levels of personal and family well-being, and alcohol consumption.[27] Having the right to choose was another reason. Similar to the present study, one of the reasons was the belief that personal freedom is violated by the forced policies of wearing a mask. Some of their quoted words were[15] *"That's because we don't want to be forced to wear a mask"*. In this regard, the psychological response is an internal response to coercion to persuade individuals and challenge the individual's sense of independence, control, or freedom of choice, and it is perceived as a threat in which the individual is aroused to oppose the rules. Therefore, when a psychological reaction occurs, anger and reciprocal arguments appear. For example, the need for people to wear masks was accompanied by a denial of the seriousness of the epidemic.[28] Another finding obtained in this study was the negative effect of the mask on facial beauty. In one study, the effect of face masks on people's perception was evaluated, indicating no negative effect of face masks on the judgment of people with masks.[14] Attitudes are the way we look at ideas, objects, and people and determine our behaviors. Social psychologists introduce three components of attitude. The cognitive component was the beliefs and thoughts that people had about something.[29] The belief system is, therefore, important as an essential guide to action. In this regard, there is a model of health beliefs. In a study, Sim et al found that people wear more masks because of their perceived sensitivity and severity to life-threatening illnesses.[22] Therefore, the factors related to a person's belief system, namely, belief in the ineffectiveness of wearing a mask, disbelief in the existence of COVID-19, belief in the transmission of coronavirus through direct contact, and belief in the adequacy of other health issues are the reasons which indicate that the perceived sensitivity, severity, and threat in these people were not enough. Some of the statements in this regard are quoted: *"During the flu season, you run into many people who have been exposed to the flu without knowing it and, in turn, expose yourself while you are not wearing a mask all through this season! Coronavirus is not a new virus, but it is just a new strand!"*[15]. Moreover, Taylor et al.'s study explained that negative attitudes about masks create an intertwined network in which the central nodes in the network include psychological reactions (e.g., the aversion to wearing a mask forcibly) and the belief that a mask does not prevent COVID-19. These central nodes of the network linked anti-mask attitudes to negative attitudes toward political conservatism, vaccination, disregard for social distancing, and beliefs that the COVID-19 threat was exaggerated.[28] With regard to the disease transmission methods, Jimenez et al found that airborne transmission is one of the main methods of transmission of this disease and is probably significant for many respiratory infectious diseases,[30] and the CDC has announced that wearing a mask will greatly reduce the risk of contracting with COVID.[31]

Life in society is one of the most important needs of human beings. We are affected by society, and society also affects us. Social influence is the effect of the presence of other people and their actions or words on our feelings, attitudes, thoughts, or behaviors.[29] To be ridiculed by others was a reason for not wearing a face mask. The need for culture concerning wearing a mask has been recommended in some studies.[15,20,32] Moreover, cultural variation in adherence to social norms seems to influence responsiveness to measures and guidelines provided by official institutions to reduce disease outbreaks, especially when these policies are voluntary.[33] This means that people in different cultural backgrounds may react differently to the same external conditions, policies, or information.[34] In the focus group interviews, students thought they are stigmatized by others and reported that they experience prejudice.[32] One of the participants in a study said, *"I put on a mask for a few days, but my friends made fun of me and said, "When did you get so fastidious?", so I took it off"*.[20] Another reason was imitation. One of the ways of social learning according to Bandura's theory is modeling by imitation and observation.[29] A study by Kwok et al examined "What shapes people's willingness to wear a face mask". A sample quotation obtained from written data was *"I think when the whole society begins wearing masks together, it becomes a normal social phenomenon."*[17] Another sub-category of social factors was the lack of serious use of masks. A similar finding in other studies was a lack of seriousness, determination, and insistence on observing health issues, careless execution of officials, insufficient supervision over compliance with health standards, and lack of laws to punish violators.[20] On the contrary, a participant in another interview said, *"You can hardly get out without a mask! The gatekeeper of the housing estate won't let me go out without a mask. This is the rule"*.[17] A subset of other social factors included "No need for healthy people to wear masks". Part of this justification is due to insufficient information or beliefs about how the disease is transmitted, and the other part is a lack of self-responsibility. In this regard, a comment has been quoted, *"My friends did not care about wearing face masks; it was like normal life for them. When I explained that face masks can stop you from spreading the disease to other people, they said sick people should just stay home.*

. . I told them this would only happen in an ideal world and that's why face masks are important. They said they weren't scared of the virus, and it was not a matter of concern. Finally, I gave up trying to persuade them".[32] In a study, the authors who analyzed tweets containing the hashtags #Masks4All and #No Masks about the influence of important people in society stated that, "*When social norms are significantly gendered, they can be detrimental to public safety and health*".[35] Perceived social norms and fear make an important contribution to the predictability of behavior and intention to wear a mask. In general, it is important to study cognitive, social, and emotional factors for a better understanding and behavior of wearing a mask during the epidemic.[36] In addition, important institutions must work to build trust and honesty in the people so that people are encouraged to adopt vital health guidelines.[16] Based on the evidence, identified factors motivating self-care in pandemics during twenty years included risk perception, health education, and social trust. Adherence to the advice of public health organizations is the result of people's awareness of the danger of the situation, trust in the recommendations of government organizations, and empathy that organizations should attend.[37] The consequences of politicization have affected health and hygiene behavior such as wearing a mask during the Corona pandemic.[38]

Living and working in a wide-open space and the need to use masks in closed and crowded spaces were other reasons for not wearing a mask. It seems that these opinions can be associated with uneasiness and shortness of breath.[15] Low-risk jobs and not having a job were similar reasons.[20] *"In my opinion, a cotton mask is good enough to ensure travel safety if not in high-risk areas."* and *"I don't go too far away from my home, so one mask is enough"*. Moreover, *"If I go out to buy groceries (in markets and crowded places), I will wear an N95 mask. However, if I only need to handle some personal affairs near my home, I will only wear a surgical mask*". In another study, 83% of the respondents said that masks should be worn, but even among that group, 23% did not use masks in gyms, 24% in restaurants, and 19% at work. Of course, masks may not be necessary for all workplaces, but it is expected that most indoor situations will include hallways or public spaces that require the least use of masks.[39]

Economic reasons included having financial problems, fear of business slump, a means for some people to get rich, and the rarity of the good-quality mask. Other findings suggested that debt, low income, tenancy, and spending money on family and home are other reasons for not wearing a mask[20]. In a similar study in response to why others do not wear masks, 54% of the participants stated that face masks were difficult to make or purchase.[19] People who are in a difficult financial situation often think that others make money by paying them, while they know from the inside that they are part of this cycle of eliminating the need in nature. Lack of access to the appropriate mask has been reported in several studies.[17,19,20,32] For example: *"I went to a number of pharmacy stores, but no face masks were available. I tried to make online orders, but everything was out of stock. Finally, my mother sent the boxes to me by express mail*".[32] In the study by Arnetz et al, the most important reasons for preventing personal care during COVID-19 were inability to pay, lack of awareness of organizational care protocols, more stress related to COVID-19, and frequent discussions about this virus with family and friends, and the only important variable was environment-related care avoidance.[40]

Respiratory problems, foggy eyeglasses, and difficulty seeing were physical factors. Ribeiro et al found that people who used masks for professional and essential activities were more likely to complain of vocal distress and fatigue, vocal disturbances, speech comprehension problems, and breathing and speech coordination.[41] One of the comments was *"I have to wear a mask at work, but this makes it difficult for me to breathe and restricts airflow"*. Koseoglu et al in a study on 576 people investigated the problems caused by wearing a mask during the Corona period and observed that the most important physical problems are difficulty in breathing through the nose, itchy nose and pain, earache, difficulty in expressing oneself, difficulty in speech understanding, and ear itching; furthermore, they expressed the need to discover new ways to use masks in society.[42] In a similar study, when using a mask, the visual ability of people with glasses decreased significantly.[43] Therefore, it is suggested to design a mask that innovatively solves this problem by optimizing the flow of hot breath air to exit from the sides instead of up.[44] Other reasons were previous affliction with COVID-19, the tendency to get a coronavirus, belief in not being infected with COVID-19, no serious or chronic illness, and belief in genetic resistance to disease. These reasons indicated that people have a strong belief in their immune systems, while many people who died of the coronavirus were athletes or people without a chronic disease. Although a strong immune system reduces the severity of the disease, there is no reason not to get it. Providing information in this regard by mentioning similar cases can be useful.[20] Probably, these cases are related to some people's perception of the concept of collective immunity through contracting the disease. As we witnessed, during the COVID-19 crisis, some individuals were infected many times, and each time it had many complications. It seems that the level of awareness and health literacy of people should be increased.[45] The results of this study will help promote health at three levels of prevention. The first level is measures taken before the disease occurs, the second level is early diagnosis and early treatment, and the third level is rehabilitation. At the second level, namely, the prevention level, we screen healthy people from those who appear healthy. Awareness of these levels of prevention helps to increase the health of society.[45]

Conclusion

According to the current and previous studies, it is

concluded that proper education, honesty and trust among the people and government, the practice of appropriate social norms, the improvement of the economic infrastructures, and the strengthening of the belief system of individuals will encourage healthy behaviors such as wearing masks during the coronavirus pandemic. On the other hand, the COVID-19 crisis made the world realize the striking need to improve the level of people's education and their psychological examination in health-related behaviors. In a new psychological study, it was shown that many health-promoting behaviors are related to psychological factors even if the psyche is not directly mentioned. For example, in this study, the factors affecting the belief system, social relations, trust in governments, the tendency of some people not to get rich, and the like are all rooted in the psychological factors of the individual. The unconscious and complex psyche adopts different mechanisms in dealing with issues. Therefore, it is recommended to pay more attention to the issue of education, especially psychological aspects, to improve health behaviors.

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Competing Interests

The authors declare that they have no competing interests.

Consent for Publication

Not applicable.

Ethical Approval

This study was approved by the Ethics Committee of Larestan University of Medical Sciences (IR.LARUMS.REC.1400.010), and written informed consent was obtained from the study participants. Moreover, their information remained confidential at all stages of the study.

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