Preventive Care in Nursing and Midwifery Journal
2023; 13(1): 14-25

Attitude and Performance of the Adult Population Regarding Social Distancing During the COVID-19 Pandemic in the City of Gerash, Fars, Iran

Sajad Pouryousef[1], Rouhollah Rouhandeh[2], Sedigheh Yeganeh[3*], Hajar Haghshenas[4], Esmail Parsayee Manesh[5], Tayebeh Bahmani[6], Ahmad Reza Simin[7], Misagh Mashi[7], Samira Daneshvar Dehnavi[8]

[1]MSc of Nursing, School of Paramedical, Gerash University of Medical Sciences, Gerash, Iran
[2]School of Paramedical, Gerash University of Medical Sciences, Gerash, Iran
[*3]MSc of Nursing, Gerash Amir-al-Momenin medical and educational center, Gerash University of Medical Sciences, Gerash, Iran
[4]PhD Candidate, School of nursing, Gerash University of Medical Sciences, Gerash, Iran
[5]MSc of Nursing, School of nursing, Gerash University of Medical Sciences, Gerash, Iran
[6]Instructor of operating room, department of operating room, school of Nursing, fasa University of Medical Science, Fasa, Iran
[7]Student Research Committee, Gerash University of Medical Sciences, Gerash, Iran
[8]MSc in Critical Care Nursing, Shaheed Rajaei Cardiovascular Medical and Research Center, Tehran, Iran

Corresponding Author Address: Gerash Amir-al-Momenin medical and educational center, Vahdat Blv, Gerash University of Medical Sciences, Gerash, Iran

Tel: 0098-9171898792

Email: sedighe.yegane@yahoo.com

Received: 4 Feb 2022 **Accepted**: 17 Dec 2022

Abstract

Background: People's attitude and performance regarding social distancing during the COVID-19 pandemic plays a crucial role in determining the society's readiness to adopt new hygiene practices.
Objectives: This study aims to evaluate the attitude and performance of the adult population regarding social distancing during the COVID-19 pandemic in the city of Gerash, Iran.
Methods: This cross-sectional study 623 adults in Gerash who were recruited through convenience sampling. The data collection instrument was a self-designed social distancing attitude and performance questionnaire. The data were analyzed using SPSS v. 16.
***Results*:** The results showed that 66% of the participants were female, and 51% were aged between 18 and 29 years. The participants' mean (SD) scores for attitude and performance were 19.41 (2.36) and 14.76 (1.75), respectively. Approximately 16% of the participants had a negative attitude and 15% had poor performance with regard to social distancing. The mean (SD) score of attitude and performance was significantly higher in females, married and older participants ($p<0.05$). In addition, logistic regression showed that the performance of the subjects with a negative attitude was 0.26 times that the performance with a positive attitude (P= 0.001, OR= 0.265).
Conclusion: According to the study findings, it is recommended that the healthcare authorities in the city of Gerash take effective measures to educate the age group under 30 years, the male population, and single individuals to change their attitude and improve their performance to better control the spread of COVID-19.

Keywords: attitude, COVID-19, performance, social distancing

Introduction

On March 11, 2020, WHO declared COVID-19 a pandemic [1,2]. By 18.05.2022, 524.374.327 people in the world had contracted COVID-19 and 6.293.401 lost their lives as a result. Up to the same date in Iran, 7.229.074 people had contracted COVID-19, 141.244 of whom lost their lives as a result [3]. Generally, most of the

infected complain of fever, dry coughs, and dyspnea. Less common symptoms are rhinorrhea, sneezing, and sore throat, among others [4]. This infection is transmitted in several ways, especially through respiratory droplets. For individuals with an underlying condition, (e.g. hypertension, diabetes, respiratory diseases, cancer and heart diseases), children and the elderly, COVID-19 is known as a potential cause of severe infection and death [5,6].

From the beginning of the outbreak of COVID-19, quarantine, social distancing, medication and vaccination have been among the global measures to control the disease. Despite promising advances in controlling the infection with vaccines, up to May 18, 2022, only 63 million of the population of Iran had received the first dose and only 57 million had received full doses of a COVID-19 vaccine [7,8] Thus, in Iran, wearing masks and practicing social distancing (reducing physical contact between people, thereby lessening the chances of spreading the illness), which were recommended as important methods of COVID-19 prevention and control from the onset of the pandemic, are still the main protective measures against this viral infection [9-12].

Social distancing is associated with many benefits, including a decrease in transmission of the virus and fewer cases of infection; however, it can cause such problems as a reduction in social interactions and a rise in loneliness, depression, anxiety, and financial losses [13,14]. According to a study by Nelson et al. (2020), people may refuse to practice social distancing for various reasons, such as economic factors, personal attitude towards the problem, social issues, etc., and may not make the same response to crises. [15].

One of the crucial factors in individuals' observance of social distancing is their attitude to this behavior [16]. A study by Hosseini et al. (2020) in Tehran, Iran showed that, despite satisfactory levels of people's awareness of the significance of social distancing, over 70% of the sample in their study had a negative attitude to it [17]. According to a study by Hills et al. (2021), people may deliberately refrain from practicing social distancing, which fact stresses the importance of assessing and improving people's attitude of social distancing [18]. Piyoosh Kumar Singh (2022) found that out of 500 subjects in India, only 50% expressed a positive attitude and displayed appropriate performance with regard to social distancing; the prevailing social situation and attitude are effective factors in correct performance [19]. Successful control of the spread of COVID-19 depends on making changes to people's attitude and performance, which are a function of their general attitude [20]. Kindu Alem Molla (2021) reported people's attitudes toward control of COVID -19 to be negative and their performance to be poor in Ethiopia: people did not wash their hands and wear masks in public [21]. Majid Mirmohammad khani (2021) found that 42% of people in Iran had average to poor performance regarding social distancing [22].

The city of Gerash is located in the south of Fars Province, Iran, and has a population of 57,500. By 3.7.2022, 11,177 cases of COVID-19 infection and 73 deaths had been reported in this city, which, considering its total population, indicates a high rate of infection [23]. To date (03.07.2022), 35.466 people have received the first dose and 25.973 have received three doses of a COVID-19 vaccine in Gerash [24]. Unlike big cities, the small city of Gerash does not have an advanced public transportation system (subway and city buses) or shopping malls and the city parks are almost empty in the first two seasons of the year because of the hot climate of that area. However, crowded family get-togethers are popular with the people of Gerash. In view of these facts and the high rate of infection in this city, there is need for an investigation into the attitude and performance of the people of Gerash with regard to social distancing. An evaluation of people's attitude and performance with regard to social distancing during the COVID-19 pandemic can prove useful in determining the society's readiness to adopt new hygiene behaviors and the status of the citizens' current observance of the protocols issued by the healthcare authorities. This study aims to evaluate the attitude and performance of the adult population regarding social distancing via mobile phone-based social networks during the COVID-19 pandemic in Gerash.

Methods

This is a cross-sectional study with a descriptive-analytical design. At the time of sampling (spring and summer of 2021), Gerash was going through the fourth peak of the COVID-19 infection. The

inclusion criteria were: being aged between 18 and 60 years, being literate, residing in Gerash, and having an account on mobile phone-based social networks, e.g. WhatsApp or Instagram, and news networks (to maintain social distancing, the researchers avoided exposing the subjects to stress and gathering them in one place for sampling). The subjects were members of social networks affiliated with Gerash University of Medical Sciences. The subjects who failed to complete their questionnaires fully were excluded from the study.

In the next step, considering the size of the population (the total population of individuals aged above 18 years in Gerash) (N=24.867) and using Cochran formula with a margin of error of d=0.05, a confidence level of 98%, and sample dropout rate of 20%, the minimum sample size was set at 616 individuals. The subjects were selected via simple random sampling and mobile phone-based social networks.

Data were collected using Epoll software: the items of the questionnaire were entered into Epoll software and then the residents of Gerash were given access to the link of the questionnaire via the social networks of WhatsApp, Instagram and news networks. On the first page of the questionnaire, the participants were provided with a consent form and assurance of confidentiality of their answers. In total, out of the 723 completed questionnaires, 623 were completed properly.

The questionnaire consisted of three sections: a demographic characteristics survey and a consent form for informed participation in the study, a self-designed social distancing attitude questionnaire (7 items), and a self-designed social distancing performance questionnaire (8 items). The attitude and performance sections of the questionnaire were developed according to Waltz's four-stage procedure: item development, evaluation of face and content validity, evaluation of internal consistency, and test-retest reliability [25].

The attitude questionnaire consisted of seven items and three factors (Table 2). The final CVI and CVR of the questionnaire were found to equal 0.92 and 0.77 respectively. The items were scored on a 3-point Likert scale: Agree=3, Not sure=2, and Disagree=1. A score of between 17 and 21 (70% ≤ attitude) indicates positive attitude and a score of between 7 and 16 indicates a negative attitude [26].

The performance questionnaire consisted of eight items and three factors (Table 3). The final CVI and CVR of the questionnaire were found to equal 0.98 and 1 respectively. The reliability of this instrument was 0.76. The respondents were asked to choose either yes or no for each item: Yes=2 and No=1. A score of between 12 and 16 (50% ≤ performance) [27] indicates good performance and a score of between 8 and 11 indicates poor performance. Also, the Spearman correlation coefficient showed a significant direct relationship between the scores obtained in the two stages (r=0.42, p-value=0.025). Therefore, the reliability of the attitude and practice questionnaire was confirmed [28].

The collected data were analyzed using descriptive statistics, including frequency and percentage, for the qualitative variables. Analytical statistics, including chi-square, Pearson correlation coefficient, Mann-Whitney U test, Kruskal-Wallis test, Correlation coefficient Phi and binary logistic regression were used for modeling the dichotomous qualitative data, such as the Bernoulli variables of attitude and performance as response variables. The significance level was set at 0.05 for all the tests. The data were analyzed using SPSS v. 16.

Results

Of the 623 participants who completed the questionnaire, 66% were female, 51% were aged between 18 and 29 years, 32.9% were aged between 30-39 years, and 58.7% were married. 75.3% had a high school diploma to a bachelor's degree. 36.6% were employees and 25.2% were housewives. 43.7% had a history of domestic travels and 6.1% had a history of foreign travels (Table 1).

Table 1: Frequency Distribution of the Participants' Demographic Characteristics (N= 623)

Variable		Number	Percentage
Gender	Male	212	34
	Female	411	66
Age	18-29	318	51
	30-39	205	32.9
	40 -60	100	16.1
Marital status	Single	257	41.3
	Married	366	58.7
Education level	Less than high school	59	9.5
	diploma to bachelor's degree	469	75.3
	Above bachelor's degree	95	15.2
Occupation	Housewife	157	25.2
	Self-employed	81	13
	Employee	228	36.6
	Worker	20	3.2
	Unemployed	137	22
Income level	Under 50 million Rial(IRAN)	508	81.5
	Between 50 and 100 million Rial(IRAN)	100	16.1
	Above 100 million Rial(IRAN)	15	2.4
History of domestic travels	Yes	38	6.1
	No	585	93.9
History of foreign travels	Yes	272	43.7
	No	351	56.3
History of COVID-19 infection	Yes	154	24.7
	No	469	75.3
COVID-19 infection in a family member	Yes	226	36.3
	No	397	63.7
Underlying disease	Yes	47	7.5
	No	576	92.5
Employment in a clinical center	Yes	149	23.9
	No	474	76.1

The results showed that, overall, 83.9% of the participants had a positive attitude to social distancing: 77.5% believed that they were at risk of infection with the new coronavirus and 75.1% believed that infection with the new coronavirus was dangerous. 94.4% of the participants believed that everyone in the society should practice social distancing (Table 2).

Table 2: Number and Percentage of the Participants' Responses to the Items of the Attitude Questionnaire (n=623)

Factor	No.	*Item	Agree N (%)	Not sure N (%)	Disagree N (%)
1st	1	In my opinion smoking (cigarettes and water pipe) reduces the risk of getting COVID-19.	45(7.2%)	55(8.8%)	523(83.9%)
	2	In my opinion use of addictive drugs, e.g. opium, reduces the risk of getting COVID-19.	33(5.3%)	83(13.3%)	507(81.4%)
	3	In my opinion consumption of alcoholic drinks reduces the risk of getting COVID-19.	30(4.8%)	75(12%)	518(83.1%)
2nd	4	In my opinion it is not necessary for everyone to practice social distancing.	19(3%)	16(2.6%)	588(94.4)
	5	In my opinion it is not necessary to practice social distancing in get-togethers or parties.	32(5.1%)	20(3.2)	571(91.7%)
3rd	6	I believe that I will never get COVID-19.	52(8.3%)	88(14.1%)	483(77.5%)
	7	In my opinion getting COVID-19 will not put my life in danger.	78(12.5%)	77(12.4%)	468(75.1%)
Average rate			6.6%	9.5%	83.9%

***All Items have reverse scoring**

The mean (SD) of the participants' performance scores was 14.76 (1.75). 15% had poor performance with regard to social distancing. The best area of their performance was "I practice

social distancing in public transportation vehicles" (95.2%) and the worst area was "I do not touch my mask without sanitizing my hands first" (72.1%) (Table 3).

Table 3: Number and Percentage of the Participants' Responses to the Items of the Performance Questionnaire (n=623)

Factor	No.	Item	Yes N (%)	No N (%)
1st	1	In public places, I wear gloves or use a tissue before I touch a handle (buses, taxis, doors).	483(77.5%)	140(22.5%)
	2	I do not touch my mask without sanitizing my hands first.	449(72.1%)	174(27.9%)
	3	When I get home, I sanitize my cell phone.	489(78.5%)	134(21.5%)
	4	In stores, I do not touch raw foods and wear gloves before I touch raw foods.	504(80.9%)	119(19.1%)
2nd	5	In public transportation vehicles, I open a window if possible.	593(95.2%)	30(4.8%)
	6	I practice social distancing in public transportation vehicles.	593(95.2%)	29(4.7%)
3rd	7	I sanitize public playground equipment for my child.	538(86.4%)	83(13.3%)
	8	In public places of worship, I use personal prayer mat, stone, and books.	563(90.4%)	60(9.6%)
		Average rate	84.5%	15.5%

Analysis of the data using the Mann-Whitney U test showed that the females' attitude mean score was significantly higher than the males' ($p=0.048$), and that the married subjects' attitude mean score was significantly higher than the single subjects' ($p<0.001$).

Moreover, Kruskal-Wallis non-parametric test was used to compare the attitude scores across the three age groups of the participants in the study. The results showed that the difference in the attitude mean scores ($P=0.001$) was significant. Hence, at the modified Bonferroni significance level ($P=0.016$), Mann-Whitney post hoc tests were used to compare the attitude mean scores of the age groups in pairs. The results showed that, compared to the 18-29 years old age group, the subjects who were aged 40-60 years and above had a significantly higher attitude mean score ($p<0.001$).

Kruskal-Wallis non-parametric test was used to compare the participants' attitude scores across the five job divisions. The results showed that the difference in the attitude mean scores was significant ($P=0.007$). Therefore, at the modified Bonferroni significance level ($P=0.005$), Mann-Whitney post hoc tests were used to compare the attitude mean scores between different job divisions in pairs. The results showed that the subjects who were employees had a significantly higher attitude mean score than the subjects who were self-employed ($p=0.002$), and the housewives had a significantly higher attitude mean score than the subjects who were self-employed ($p<0.001$). The other variables did not correlate significantly with attitude to social distancing (Table 4).

Table 4: Univariate Analysis of Factors Affecting Attitude and Performance

Variable	Category	Attitude		Performance	
		Mean±SD	P-Value	Mean±SD	P-Value
Gender	Male	19±2.77	0.048 [1]	14.26±2.09	<0.001 [1]
	Female	19.61±2.09		15±1.49	
Age(year)	18-29	19.23±2.27	<0.001 [2]	14.51±1.84	<0.001 [2]
	30-39	19.39±2.68		14.91±1.68	
	40-60	20±1.79		15.2±1.52	
marital status	Married	19.60±2.28	<0.001 [1]	15.06±1.45	<0.001 [1]
	Single	19.14±2.45		14.32±2.04	
Education level	Less than high school	18.95±2.87	0.176 [2]	15.29±1.34	0.018 [2]
	Bachelor's degree	19.43±2.26		14.72±1.78	
	Higher than a bachelor's degree	19.60±2.46		14.62±1.82	
Occupation	housewife	19.82±1.80	0.007 [2]	15.32±1.18	<0.001 [2]
	Self-employed	18.67±2.84		14.18±2.20	
	employee	19.50±2.50		14.86±1.68	
	worker	19.35±2.06		14.25±2.20	
	Unemployed	19.23±2.33		14.34±1.86	
Income level	50 million rials (Iran)>	19.42±2.33	0.434 [2]	14.80±1.66	0.830 [2]
	50-100 million rials	19.45±2.49		14.58±2.12	
	100 million rials<	18.80±2.60		14.53±1.81	
History of foreign travels	Yes	19.45±2.33	0.101 [1]	14.79±1.38	0.385 [1]
	No	18.68±2.65		14.75±1.78	
History of domestic travels	Yes	19.39±2.24	0.455 [1]	14.43±1.87	[1] <0.001
	No	19.42±2.45		15±1.62	
History of coronavirus infection	Yes	19.49±2.27	0.272 [1]	14.63±1.83	0.249 [1]
	No	19.38±2.39		14.80±1.73	
Family history of coronavirus infection	Yes	19.44±2.51	0.312 [1]	14.55±1.81	0.008 [1]
	No	19.39±2.27		14.87±1.71	
Underlying disease	Yes	19.51±2.25	0.757 [1]	14.62±1.74	0.388 [1]
	No	19.40±2.37		14.77±1.76	
Employment in medical centers	Yes	19.32±2.64	0.626 [1]	14.77±1.78	0.757 [2]
	No	19.43±2.27		14.75±1.75	

1. Mann-Whitney
2. Kruskal-Wallis

The results of the Mann-Whitney U test showed that the females' performance mean score was significantly higher than the males' ($p<0.001$), and that the married subjects' performance mean score was significantly higher than the single subjects' ($p<0.001$). Also, the performance mean score of the subjects with a history of domestic travels and infection of a family member with COVID-19 was lower than that of the subjects who had not travelled abroad in the past year ($p<0.001$) and had not had a family member infected with COVID-19 ($p=0.008$).

Kruskal-Wallis non-parametric test was used to compare the status of performance across the three levels of education ($P=0.018$). Therefore, at the modified Bonferroni significance level ($P=0.016$), Mann-Whitney post hoc tests were used to compare the participants' performance mean scores across the educational levels. The results showed that the performance mean score of the subjects with less than high school education was higher than that of the subjects with a high school diploma or bachelor's degree ($p=0.007$) and above ($p=0.010$).

The results of Kruskal-Wallis non-parametric test showed that the difference in the performance mean scores across the three age groups was significant ($P<0.001$). Mann-Whitney post hoc

tests were used to compare the attitude mean scores in pairs. The results showed that, compared to the 18-29-year-old age group, the subjects who were aged 40-60 years had a significantly higher performance mean score (p<0.001). The performance mean score of the 18 to 29 year-olds was significantly lower than that of the 30 to 39 year-olds (p=0.004).

In relation to occupation and performance, the results of Kruskal-Wallis test (p<0.001) and the Mann-Whitney post hoc test showed that the housewives (p<0.001) and employees (p=0.001) obtained a higher performance mean than the others (Table 4).

In the logistic regression model with the binomial dependent variable of attitude, the results showed that, at a margin of error of 5%, the independent variables did not predict the dependent variable (p>0.05) (Table 5).

Based on the results of the analytic binomial logistic regression test, the female subjects' performance was 2.84 times better than the males' (p-value=0.007, OR=0.35), and the married subjects' probability of having a good performance was 7.78 times greater than the single subjects' (P<0.001, OR=7.78). The chance of having a good performance was 8.37 times higher for the subjects whose income level was under 50 million Rials (common currency in Iran) compared to the reference group, i.e. the subjects whose income level was above 100 million Rials (Iran), which difference was statistically significant (P-value=0.020, OR =8.37).

Among the independent variables which were examined in binomial regression analysis, the variables of gender, marital status, income level, and attitude could predict change in the dependent variable (having or not having good performance): their power to predict was significant at a margin of error of 0.05% (Table 5).

The chi-square test results showed that there was a significant relationship between the subjects' attitude and performance ($X^2_{(1)}$ =13.70, p-value<0.001). 13 (27.7%) of the subjects with poor performance had a negative attitude and 518 (90.1%) of the subjects with good performance had a positive attitude. Correlation coefficient Phi was also used to check the intensity of correlation, and its value was 0.162, which indicates a weak positive relationship between positive attitude and good performance.

In addition, logistic regression showed that the performance of the subjects with a negative attitude was 0.26 times worse that the performance with a positive attitude, which difference was statistically significant (P-value=0.001, OR=0.26) (Table 5).

Table 5: Logistic Regression Model Showing the Relationship between Attitude and Performance and Demographic Variables

Variable		Attitude				Performance			
		P-value	OR	95.0%CI for OR		P-value	OR	95.0%CI for OR	
				lower	upper			lower	upper
Age (years)	18-29	0.079	0.38	0.134	1.116	0.699	1.31	0.326	5.330
	30-39	0.085	0.43	0.168	1.122	0.410	0.61	0.191	1.962
	40-60	RG*							
Gender	Male	0.074	0.57	0.312	1.056	0.007	0.35	0.165	0.750
	female	RG							
marital status	Married	0.447	1.33	0.638	2.772	0.000	7.78	2.714	22.327
	Single	RG							
Education level	high school	0.575	0.71	0.216	2.341	0.724	1.39	0.222	8.697
	Bachelor's degree	0.902	0.94	0.409	2.197	0.250	0.52	0.179	1.565
	Higher than a bachelor's	RG							
occupation	Housewife	0.151	2.18	0.752	6.325	0.849	1.14	0.284	4.613
	Self-employed	0.946	0.97	0.400	2.351	0.966	1.02	0.356	2.941
	Employee	0.614	1.27	0.502	3.213	0.937	1.04	0.326	3.374
	worker	0.452	1.86	0.368	9.422	0.236	0.43	0.107	1.735
	Unemployed	RG							

Income level	50 million Rials (Iran)>	0.298	2.17	0.505	9.334	0.02	8.37	1.395	50.320
	50-100 million Rials	0.666	1.38	0.319	5.989	0.486	1.85	0.328	10.455
	100 million Rials<	RG							
Foreign travel	Yes	0.051	2.34	0.998	5.529	0.084	0.15	0.017	1.288
	No	RG							
Domestic travel	Yes	0.094	0.62	0.360	1.084	0.233	1.51	0.767	2.982
	No	RG							
History of coronavirus infection	Yes	0.125	1.67	0.866	3.234	0.753	0.86	0.360	2.097
	No	RG							
Family history of coronavirus infection	Yes	0.122	0.60	0.325	1.141	0.914	1.04	0.486	2.238
	No	RG							
Underlying disease	Yes	0.681	1.22	0.470	3.182	0.240	1.89	0.652	5.532
	No	RG							
Medical job	Yes	0.769	1.11	0.542	2.287	0.174	0.49	0.183	1.359
	No	RG							
Attitude	Negative					0.001	0.265	0.121	0.580
	Positive	RG							
	constant	0.285	3.45			0.143	12.23		

RG: reference Group

Discussion

The present study was conducted to evaluate the attitude and performance of the residents of the city of Gerash regarding social distancing during the COVID-19 pandemic. Of the 623 participants, 83.9% had a positive attitude to social distancing. Yet, two years after the onset of COVID-19, 25% of the participants believed that they were not at risk of being infected and another 25% declared that infection with COVID-19 was not dangerous. This kind of attitude not only results in individuals' non-compliance with the various aspects of social distancing, but makes the infected feel disinclined to stay in self-quarantine. According to Mbenge et al. (2020), non-compliance with the principles of home quarantine can cause local waves of infection [29]. In small towns with small populations, like Gerash, a negative attitude to social distancing and home quarantine can lead to new local waves of infection. Stefania S Moro (2021) reported that a negative attitude toward social distancing paves the way for the faster spread of COVID-19 [30]. Cephas Sialubanje et al. (2022) found that future interventions in the domain of COVID-19 prevention should be based on correcting people's attitude to and observance of social distancing [31].

In the present study, the demographic variables of gender, age, occupation, and marital status were found to correlate with attitude. As for performance, age, gender, marital status, education level, occupation, history of domestic travels, and history of a family member's infection with COVID-19 were found to be relevant.

The results of the present study showed that females' attitude and performance with regard to social distending was better than the males', which finding is consistent with the studies by Fallahi et al. [32] and Al-Hanawi et al. [20], but does not agree with the results of a study by Adesegun et al. [27]. In view of the results of the present study, it is recommended that women should be educated in healthcare centers so that they can act as health ambassadors to raise the awareness of their family members about social distancing. According to Galasso et al. (2020), women take infectious diseases more seriously and accept the limitations ensuing from them more easily than men do, and can, therefore, be better leaders in controlling epidemics [33].

In the present study, the married subjects had better attitude and performance than the single ones, which finding is consistent with a study by Gao et al. Explaining the probable causes of married individuals' better attitude and

observance of protective behaviors compared to single, divorced, or widowed individuals, Gao states that, since married people feel compelled to protect not only themselves, but also their families, they are more inclined to learn about the principles of protection against COVID-19, have a positive attitude to protective measures, and take preventive steps [34]. These results are contrary to the results of a study by Fatemeh Hadizadeh-Talasaz et al. (2022) in which there was no relationship between marital status and social distancing [35].

As for age, the results of the present study showed that the older subjects had better attitude and performance with regard to social distancing. Old age and underlying diseases are known as risk factors in the severity and fatality of COVID-19 [36]. It is, therefore, natural that the elderly is more sensitive about such preventive measures as social distancing. In a study by Ferdous et al., the subjects aged above 30 years had a better attitude to preventive measures than the subjects aged between 12 and 20 years [37]. However, in a study by Fallahi et al., the subjects who were aged under 25 years were found to have a better attitude than those who were aged 35-45 years. It was reasoned that young people were more sensitive to the consequences of contracting COVID-19 in the future [32]. The youth's poor perception of the significance of social distancing, which can be attributed to their inclination toward socializing and being present in crowds, can increase the risk of contracting COVID-19 for them and their families.

The results of the present study also showed that housewives and the subjects who were employees had better attitude and performance than those who were self-employed, which is consistent with the findings of a study by Fallahi et al. and Kindu Alem Molla et al. [21,32]. This can be attributed to compulsory social distancing in public offices and the training provided by organizations. The results of the present study do not agree with the results of a study by Fatemeh Hadizadeh-Talasaz et al. on the impact of employment status on social distancing (2022): in this study, which was conducted on 587 people in Gonabad, only being a housewife correlated with adherence to social distancing. The reason for this difference can be different groupings of jobs and the number of participants in each group [35].

Based on the findings of the present study, the subjects with poor performance had a negative attitude and good performance had a positive attitude toward social distancing. Accordingly, health awareness programs should aim at creating a positive attitude to social distancing to increase the public's observance of this behavior. Similarly, Moore et al. (2021) reported that a positive attitude facilitates people's adherence to social distancing and adjustment to the critical conditions caused by the COVID-19 pandemic [38]. Also, according to a study by Asdaq et al. (2021), positive attitude is one of the reasons for the public's successful performance in the face of COVID-19 [39]. But even with a positive attitude toward social distancing and its contribution to performance, compliance with the principles of social distancing is not a permanent behavior and certain factors (e.g. employment status and age) may prevent proper performance despite a positive attitude [40].

Partial completion of the virtual questionnaires was one of the limitations of this study. IN order to solve this issue, the sample dropout rate was set at 20%. Another limitation of the study was the method of recruiting participants: the study samples were selected from individuals that were members of the social networks related to Gerash University of Medical Sciences, which could have influenced the results. To reduce this limitation, many social networks, such as Instagram, WhatsApp, Telegram, etc. were used, and, in order to prevent a person from completing the questionnaire twice, his/her phone number was checked and he/she was asked about having completed the questionnaire before.

It is suggested that social distancing-related behaviors in vulnerable groups and vaccinated people, attitude changes in facing environmental crises over time, and effective interventions at the community level in vulnerable groups should be investigated in future studies.

Conclusion

The results of this study showed that in people with a positive attitude towards social distancing, performance has also improved. Age, marital status, and gender were the three significant demographic factors which were related to having attitude and performance with regard to social distancing. It is essential that the healthcare policy

makers and authorities in the city of Gerash consider the role of these factors in their policies

Acknowledgments
The present article was extracted from a research project approved by the ethics committee of Gerash University of Medical Sciences, Gerash, Iran (approval code: IR.GERUMS.REC.1399.017). The subjects were informed that participation in the study was on a voluntary basis and that all information would be treated as confidential. The authors would like to thank all the people who participated in the present study.

Conflict of interest
The authors have no conflict of intrest to declare.

Funding:
The research has been carried out by Gerash University of Medical Sciences.

References
1. Cao Z, Li T, Liang L, Wang H, Wei F, Meng S, et al. Clinical characteristics of Coronavirus Disease 2019 patients in Beijing, China. PloS one. 2020; 15(6): e0234764.
2. Arab-Zozani M, Hassanipour S. Features and Limitations of LitCovid Hub for Quick Access to Literature About COVID-19. Balkan Med J. 2020; 37(4): 231-2.
3. COVID-19 Coronavirus Pandemic. [cited 2022 May 18]; Available from: URL: https://wwwworldometersinfo/coronavirus/.
4. Mohammad Alrawashdeh H, Al Zubi K, Abdulmannan DM, Al-Habahbeh O, Abu-Ismail L. Conjunctivitis as the only sign and symptom of COVID-19: A case report and review of literature. Qatar Med J. 2021; 2021(2): 31.
5. Tian S, Hu N, Lou J, Chen K, Kang X, Xiang Z, et al. Characteristics of COVID-19 infection in Beijing. Journal of infection. 2020; 80(4): 401-6.
6. Organization WHO. Transmission of SARS-CoV-2: implications for infection prevention precautions: scientific brief, [cited 2020 May 9]. World Health Organization; 2020.
7. vaccination c. [cited 2022 May 18]; Available from: URL: https://github.com/CSSEGISandData/COVID-19
8. Raveendran AV, Jayadevan R. Reverse quarantine and COVID-19. Diabetes & Metab Syndr. 2020; 14(5): 1323-5.
9. Saki M, Ghanbari MK, Behzadifar M, Imani-Nasab MH, Behzadifar M, Azari S, et al. Focus: Preventive Medicine: The Impact of the Social Distancing Policy on COVID-19 Incidence Cases and Deaths in Iran from February 2020 to January 2021: Insights from an Interrupted Time Series Analysis. Yale J Biol Med. 2021; 94(1): 13- 21.
10. Howard J, Huang A, Li Z, Tufekci Z, Zdimal V, van der Westhuizen H-M, et al. An evidence review of face masks against COVID-19. Proc Natl Acad Sci U S A. 2021; 118(4): e2014564118.
11. Karbasi A, Abyazi MA, Aghdam MH, Bahardoust M, Heiat F, Jahromi AY, et al. Evaluating the effects of common health instructions and proceedings on COVID-19 prevention. J Appl Biotechnol Rep. 2020; 7(4): 233-6.
12. Wu JR, Chung M, Lennie TA, Hall LA, Moser DK. Testing the psychometric properties of the Medication Adherence Scale in patients with heart failure. Heart lung. 2008; 37(5): 334-43.
13. Nieuwenhuis MM, Jaarsma T, van Veldhuisen DJ, van der Wal MH. Factors associated with patient delay in seeking care after worsening symptoms in heart failure patients. J Card Fail. 2011; 17(8): 657-63.
14. Thunström L, Newbold SC, Finnoff D, Ashworth M, Shogren JF. The benefits and costs of using social distancing to flatten the curve for COVID-19. J Benefit-Cost Analysis. 2020;11(2):179-95.
15. Nelson LM, Simard JF, Oluyomi A, Nava V, Rosas LG, Bondy M, et al. US public concerns about the COVID-19 pandemic from results of a survey given via social media. JAMA Int Med. 2020; 180(7): 1020-2.
16. Li S, Xu Q. Family support as a protective factor for attitudes toward social distancing and in preserving positive mental health during the COVID-19 pandemic. J Health Psychol. 2020: 1359105320971697.
17. Hosseini J, Nematollahi S, Pour ME, Shariatpanahi S, Milani AS. Knowledge, Attitudes and Practice of Tehran Citizens regarding the Social Distancing rules and its Related Factors during the COVID-19 Pandemic. Men's Health J. 2020; 4(1): e17.

18. Hills S, Eraso Y. Factors associated with non-adherence to social distancing rules during the COVID-19 pandemic: a logistic regression analysis. BMC Public Health. 2021; 21(1): 352.
19. Singh PK, Anvikar A, Sinha A. COVID-19 related knowledge, attitudes, and practices in Indian Population: An online national cross-sectional survey. PloS one. 2022; 17(3): e0264752.
20. Al-Hanawi MK, Angawi K, Alshareef N, Qattan A, Helmy HZ, Abudawood Y, et al. Knowledge, attitude and practice toward COVID-19 among the public in the Kingdom of Saudi Arabia: a cross-sectional study. Front Public Health. 2020; 8: 217.
21. Molla KA, Abegaz SB. Community knowledge, attitude and practices to SARS-CoV-2 disease 2019 (COVID-19): A cross-sectional study in Woldia town, Northeast Ethiopia. PloS one. 2021;16(4):e0250465.
22. Mirmohammadkhani M, Bemanalizadeh M, Yazdi M, Goli P, Mohebpour F, Saffarieh E, et al. Knowledge, Attitudes, and Practices toward COVID-19 among Persian Birth Cohort Participants. J Educ Health Promot. 2021; 10: 358.
23. Corona infection and death statistics in Gerash city [cited 2022 March 3]; Available from: URL: https://b2nir/n63889.
24. Vaccination statistics in Gerash [cited 2022 March 3];. Available from: URL: https://7berkehir/archives/121932.
25. Waltz CF, Strickland OL, Lenz ER. Measurement in nursing and health research: Springer publishing company; 2010.
26. Soares LS, Almeida RCC, Cerqueira ES, Carvalho JS, Nunes IL. Knowledge, attitudes and practices in food safety and the presence of coagulase-positive staphylococci on hands of food handlers in the schools of Camaçari, Brazil. Food Control. 2012; 27(1): 206-13.
27. Adesegun OA, Binuyo T, Adeyemi O, Ehioghae O, Rabor DF, Amusan O, et al. The COVID-19 crisis in sub-Saharan Africa: knowledge, attitudes, and practices of the Nigerian public. Am J Trop Med Hyg. 2020; 103(5): 1997-2004.
28 .Rouhandeh R, Pouryousef S, Yeganeh S, Parsayee Manesh E, Bahmani T, Simin AR, et al. Development of the Attitude & Practice Towards Social Distancing Questionnaire and Evaluation of Its Validity and Reliability During the COVID-19 Pandemic in Iran. Health Emerg Disasters Quarterly. 2022; 7(4): 205-14.
29. Mbenge CC, Tlale L, Ntoni L, Mokgethi N, Kololo SO, Pharatlhatlhe R, et al. Shortfalls in home quarantine for COVID-19 prevention: a case report. Pan Afr Med J. 2020; 37(Suppl 1):39.
30. Moro SS, Steeves JKE. Lack of affective priming indicates attitude-behaviour discrepancy for COVID-19 affiliated words. Scientific reports. 2021; 11(1): 21912.
31. Sialubanje C, Sitali DC, Mukumbuta N, Liyali L, Sumbwa PI, Kamboyi HK, et al. Perspectives on factors influencing transmission of COVID-19 in Zambia: a qualitative study of health workers and community members. BMJ Open. 2022; 12(4): e057589.
32. Fallahi A, Mahdavifar N, Ghorbani A, Mehrdadian P, Mehri A, Joveini H, et al. Public knowledge, attitude and practice regarding home quarantine to prevent COVID-19 in Sabzevar city, Iran. J Mil Med. 2020; 22(6): 580-8.
33. Galasso V, Pons V, Profeta P, Becher M, Brouard S, Foucault M. Gender differences in COVID-19 attitudes and behavior: Panel evidence from eight countries. Proc Natl Acad Sci USA. 2020; 117(44): 27285.
34. Gao H, Hu R, Yin L, Yuan X, Tang H, Luo L, et al. Knowledge, attitudes and practices of the Chinese public with respect to coronavirus disease (COVID-19): an online cross-sectional survey. BMC Public Health. 2020; 20(1): 1-8.
35. Hadizadeh-Talasaz F, Delshad Noghabi A, Mohammadzadeh F. Relationship between Socio-Demographic Factors and Adherence to Social Distancing Recommendations During Covid-19 Pandemic in Gonabad, Iran: A Cross-Sectional Study. Int J Community Based Nurs Midwifery. 2022; 10(2): 134-45.
36. Nikpouraghdam M, Farahani AJ, Alishiri G, Heydari S, Ebrahimnia M, Samadinia H, et al. Epidemiological characteristics of coronavirus disease 2019 (COVID-19) patients in IRAN: A single center study. J Clin Virol. 2020; 127: 104378.
37. Ferdous MZ, Islam MS, Sikder MT, Mosaddek ASM, Zegarra-Valdivia J, Gozal D. Knowledge, attitude, and practice regarding COVID-19 outbreak in Bangladesh: An online-based cross-sectional study. PloS one. 2020; 15(10): e0239254.

38. Moore KA, Lucas JJ. COVID-19 distress and worries: The role of attitudes, social support, and positive coping during social isolation. Psychol Psychother. 2021; 94(2): 365-70.
39. Asdaq SMB, Alshrari A, Imran M, Sreeharsha N, Sultana R. Knowledge, attitude and practices of healthcare professionals of riyadh, saudi arabia towards covid-19: a cross-sectional study. Saudi J Biol Sci. 2021; 28(9): 5257-82.
40. Matthews VS, Stough-Hunter A, Marazita JM. Attitudes towards social distancing in response to COVID-19. Public Health Nurs(Boston, Mass). 2021; 38(6): 1019-29.