

The Relationship between Resilience and Anxiety of Coronavirus Disease (COVID-19) in the Nurses of Ali Asghar Children's Hospital in Tehran, 2020

HAMIDREZA KHOSHNEZHAD EBRAHIMI¹, MANIZHEH AMIRMOHAMADI¹, SOMAYEH ESMAEILIAN¹, SOROOR SOHRABI¹, SAEIDEH IRANMANESH¹, ZEINAB SOHRABI², SHABAHANG JAFARNEJAD¹

¹ Emergency Medicine Management research Center, Iran University of Medical Sciences, Aliasghar Children Hospital, Tehran, Iran

² Department of statistics, Faculty of Mathematics and Statistics and Computer Science, Semnan University, Semnan, Iran

Corresponding author: Shabahang Jafarnejad, Email: jafarnejad.sh@iums.ac.ir Tel: +98-21-22222041

ABSTRACT

Background: Novel Coronavirus infectious disease has become one of the major health crises of the new generation. Nurses play an important role in providing medical services to manage and reduce infectious diseases. Admission of a large number of patients with COVID-19 in the hospitals has led to an increased demand for medical attention and care services from nurses and physicians in the community; Treatment staff themselves experience significant psychological changes during the patient care period. The role of nurses goes beyond patient care. Nurses around the world are struggling with the impact of Corona on their lives, their families, and in addition the demands of long working hours and concerns about workplace safety.

Aim: To investigate the relationship between resilience and the anxiety of corona disease (COVID-19) in nurses of Ali Asghar Children's Hospital in Tehran, in 2020.

Methods: This research is a cross-sectional study. The statistical population of the research includes 100 nurses of Hazrat Ali Asghar Hospital in Tehran, in 2020. A Census sampling method was applied to select the statistical population and the nurses filled different parts of a questionnaire about the resilience and anxiety of Coronavirus disease. The five-point Likert scale was used for this study. SPSS version 24 was used to analyze the data. Also, the Pearson's correlation coefficient was used to determine the correlation between resilience and anxiety of Corona disease.

Data analysis: Since sig is greater than 0.05, the null hypothesis is confirmed and there is no significant correlation between resilience scale and Coronavirus infection anxiety. Also, the coefficient of this correlation is 0.018 for 100 samples, which indicates a weak correlation. Considering the mean of all variables, it could be concluded that there was a significant relationship between the characteristics of demographic factors and the resilience and Coronavirus disease anxiety, which means that factors such as gender, age, etc. affect the anxiety of COVID-19 and resilience.

Conclusion: Considering that Hazrat Ali Asghar Hospital is a children's hospital and has a smaller number of children with Corona disease, nurses in children's hospitals are less prone to the anxiety of Corona disease. The results showed that there is no significant correlation between these two variables. In fact, the obtained correlation coefficient, which shows the number 0.018, indicates a weak correlation. According to nurses, when there is no clear solution to problems, sometimes God and destiny help people. They rely on God first of all. For most of them, coping with stress makes them stronger.

INTRODUCTION

On March 11, 2020, the World Health Organization (WHO) declared a pandemic caused by the rapid and global outbreak of the new coronavirus¹. In humans, coronavirus is more likely to cause respiratory and gastrointestinal symptoms, ranging from cold symptoms to more severe illnesses such as bronchitis, pneumonia, acute respiratory syndrome, blood coagulation disorders, multiple organ failure, and possible death^{2,3}. Worldwide, there have been hundreds of thousands of cases of Coronavirus disease (COVID-19) and thousands of deaths, especially among vulnerable populations such as the elderly⁴. Emerging global epidemics pose many dangers to individuals and communities. Nurses play an important role in providing medical services to manage and reduce infectious diseases. Coronavirus disease is the third leading cause of death in the world⁵. Corona pandemic has become one of the major health crises of the new generation. This epidemic has affected people of all nations, continents, races, and economic groups. Required responses such as

quarantine of entire communities, school closures, and social isolation, have caused a sudden change to the everyday life of people⁶. Unclear forecasts, drastic shortage of resources to test, treatment and protection of healthcare providers from the infection, imposing vague health measures, large and growing financial losses, and conflicting messages from officials are among the most important stressors; which will undoubtedly contribute to widespread emotional distress and an increased risk of Corona-related mental disorders⁷. Health care providers play an important role in addressing these emotional and mental outcomes the new coronavirus epidemic is more widespread in humans than previous coronaviruses, indicating the extremely high infectivity of the virus. However, the death rate of the new coronavirus (SARS-COV-2) is much lower than other coronaviruses such as SARS and MERS, and other viruses such as HIV and Ebola. Currently, due to the lack of effective treatment and vaccines, the best way to deal with this disease is to avoid infection and prevent its spread through protective

measures and personal hygiene⁸. The high prevalence of Corona in many countries, due to its novelty and highly contagious nature, and the resulting morbidity and mortality rate, is creating an unprecedented demand for health care services worldwide. In addition to admitting a large number of patients with COVID-19 in the hospitals, the demand for nursing and assistant care in the community, in health centers, and mental health services has also increased⁹, and this pandemic has affected all aspects of nursing activities¹⁰. Nurses are at the center of a range of outcomes of the corona pandemic, including its mental health effects. As the largest healthcare profession with nearly four million nurses in the United States and more than 20 million nurses worldwide, nurses now address the physical and mental health aspects of the disease directly through hospitals and patient care in the community¹¹. They experience significant psychological changes during the patient care period. Nurses need to take care of both their patients and themselves; Also, they feel confused and scared¹². High workload and patient care duties could increase the possibility of transmitting the virus from a patient to others¹³. The role of nurses goes beyond patient care; Nurses around the world are struggling with the impact of Corona on their lives, their families, as well as long working hours and concerns about workplace safety. In Italy, for example, many nurses have lost their lives during the corona pandemic due to lack of sleep, prolonged use of masks, and excessive shifts⁵. Corona disease has put enormous pressure on health care workers, and its potential impact could have implications for the physical and emotional health of the workforce¹⁴. Previous studies have shown that psychological resilience represents a mediator between stress and mental health status¹⁵⁻¹⁸. In the Temitope study, a significant negative correlation was reported between resilience and secondary traumatic stress in counselors, and low resilience was reported as a predictor of high levels of secondary traumatic stress¹⁹. Nurses need to skillfully develop resilience in order to cope with professional problems and ensure their mental health because resilience and resilient behaviors potentially help people overcome negative experiences and turn these experiences into positive ones. Given the stressful nature of nursing, resilience is an important factor as a characteristic for success in this profession²⁰. Nursing resilience strategies not only affect the nursing staff but also improve patient care outcomes²¹. More than 90% of nurses in the front-line against corona reported that they were not fully prepared to manage patients with the Corona disease, and only 20.3% reported that they were completely willing to care for patients with COVID-19. The proportion of nurses who expressed a desire to manage patients with COVID-19 was lower than previous studies that focused on other infectious diseases, in which more than 75% of nurses expressed a desire to care for patients with diseases such as H1N1 and Ebola^{22,23}. At the peak of the corona epidemic in China, there was a high prevalence of psychological distress among the general population, which was negatively correlated with resilience. Resilience is a key goal for psychological intervention in public health emergencies²⁴. A recent study in China showed a high prevalence of mental illness symptoms among all health care professionals, including depression, insomnia, anxiety

or mental disorder, and stress²⁵. Stress could not only affect the well-being of health care professionals but also their ability to care effectively for others^{26,27}. Evidence from studies on Corona disease and the prevalence of other infectious and respiratory diseases indicates that nurses are deeply concerned about their personal or family health in the situation of direct exposure to potentially deadly viruses and the stress and concern of meeting care ethics²⁸⁻³¹. Another study found that when nurses deal with public health emergencies, psychological stress reactions occur due to feelings of insecurity and potential harm³². Paying attention to the correct educational strategies is another important issue³³. During the SARS-CoV outbreak in Taiwan in 2003, many emergency and psychiatric staff suffered from the post-traumatic stress disorder. Also, the emergency department staff showed more severe symptoms of post-traumatic stress disorder than wartime staff admitted to the psychiatric ward³⁴. The success of current and future national and international efforts to effectively reduce Corona disease and other future health crises largely depends on strengthening the nursing workforce and developing nurses³⁵. Further research is now very important, in order to obtain relevant information³⁶. Timely mental health care and mental health education should be implemented as a part of professional development activities³⁷. It is important to understand the sources of anxiety and fear before reaching effective approaches to support health care professionals. Focusing and addressing these concerns must be at the heart of supportive efforts, rather than teaching general approaches to reduce stress or increase resistance⁶. Supporting the mental health and resilience of health care providers is essential to ensure global recovery from the corona pandemic³⁸. Therefore, this study was conducted to investigate the relationship between the resilience and anxiety of Corona disease (COVID-19) in nurses of Ali Asghar Children's Hospital in Tehran in 2020.

METHODS

This research is a cross-sectional study. The statistical population of the research includes 100 nurses of Hazrat Ali Asghar Hospital in Tehran, in 2020. A Census sampling method was applied to select the statistical population and nurses from different wards were included in the study, so that by referring to different wards of the hospital, resilience and anxiety questionnaires were given to the nurses; Then, in order to collect data, the objectives of the research were first explained to the individuals, and if they wished to participate in the study and informed consent, the demographic information form and related questionnaires were filled out by the individuals. At the time of filling out the questionnaire, the researcher supervised how it was completed and answered the questions of the individuals. Then, the forms and questionnaires were collected and subjected to statistical analysis and people were reassured that their information would remain confidential. In order to assess the validity and reliability of the content, the first 30 questionnaires were reviewed and after confirming the reliability, other samples were reviewed. In this study, by using designed 2 questionnaires and the responses of 100 people to these questionnaires, two components called

content validity ratio and content validity index were measured; The five-point Likert scale was used for this aim. To determine the reliability of the research instrument, the Cronbach's alpha formula was used, which after calculating Conor and Davidson resilience scale (CD-RIS) was 0.90 and for the Corona anxiety, the scale was 0.89, which due to the fact that both of them are larger than 0.70, the test had acceptable reliability. In the resilience questionnaire, 25 questions were asked and the answer to each question was presented in the form of 5 options that people chose one of the 5 options for each question. The scoring of the options on this scale is as follows: Completely incorrect = 0, rarely true = 1, sometimes true = 2, often true = 3, always true = 4, so the range of higher scores on the resilience scale indicates more resilience in the individuals. In the coronavirus disease anxiety questionnaire, 18 questions were asked and the answer to each question was presented in the form of 4 options that people chose one of the 4 options for each question. The scoring of options on this scale is as follows: never = 0, sometimes = 1, often = 2, always = 3, so the higher score on the COVID-19

Anxiety Scale indicates greater anxiety of coronavirus disease in the individuals.

RESULTS

According to the analysis of demographic factors, it could be concluded that out of a total of 100 respondents to the two questionnaires of resilience and coronavirus disease anxiety that were examined, the number of women is 96% higher than men. Most people are in the age range of 41-50 years. In terms of educational level, the frequency of the bachelor's degree is 93% higher than the master's degree among respondents and work experience of 21-30 years has the highest frequency, which is 56%. Formal employment is 72% higher than other types of employment and also the number of married people is higher. Regarding the scatter index of these variables, it could be said that all variables have low scattered and the data are almost normal. A significant relationship between the characteristics of demographic factors and the resilience and Coronavirus disease anxiety was observed, which means that factors such as gender, age, etc. affect the anxiety of COVID-19 and resilience.

Table 1- Demographic characteristics of the study population

Variables	Classification	Frequency	Percentage
Gender	Women	96	96
	Men	4	4
Age (years)	30-40	30	30
	41-50	31	31
	51-60	13	13
	61-70	13	13
	71-80	13	13
Work experience (years)	1-10	24	24
	11-20	20	20
	21-30	56	56
Level of education	Bachelor's degree	93	93
	Master's degree	7	7
Type of employment	Official	72	72
	Official trial	7	7
	Contractual	21	21
Marital status	Single	47	47
	Married	53	53

Analysis: The mean based on the studies performed on the research data, the mean of each of the 25 variables of the Resilience Questionnaire, and the 18 variables of coronavirus disease anxiety questionnaire are listed separately in the table below. In the resilience questionnaire, variable 9 with a mean of 3 had a higher mean than other questions. In the coronavirus disease anxiety questionnaire, variable 7 with a mean of 1.86 had a higher mean than other variables. Given the average of all variables, it has been found that fewer people experience coronavirus disease anxiety. Regarding the mode in the resilience questionnaire, variables 3 and 6 have modes 4 and 2, respectively, and in the other variables, the mode is equal to the number 3. Therefore, in variable 3, more people have chosen the 'always true' option. In fact, variable 3 of this questionnaire is related to God's destiny and help, which according to its mode, it could be understood that when there is no clear solution to problems, sometimes God and destiny come to the aid of man. Therefore, according to the answers of individuals to

this questionnaire, it could be observed that human beings rely on God first of all. In the Coronavirus disease anxiety questionnaire, variables 1 to 5 and 9 have mode 1, question 7 has mode 2 and the rest of the questions have mode zero. Therefore, it has been shown that most nurses are concerned about the transmission of coronavirus to others.

The standard deviation obtained from all variables is close to zero, indicating that the data have small scattered.

Analysis of the correlation of resilience with coronavirus anxiety

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho \neq 0 \end{cases}$$

Pearson's correlation coefficient was used to analyze the relationship and correlation between resilience and anxiety of coronavirus disease. Since sig is greater than 0.05, the null hypothesis is confirmed and there is no significant correlation between these two variables. Also, the coefficient of this correlation is 0.018 for 100 samples.

Table2- Frequency distribution of the resilience questionnaire

questionnaire A		Percentage												
		Q1Q1	Q1Q2	Q1Q3	Q1Q4	Q1Q5	Q1Q6	Q1Q7	Q1Q8	Q1Q9	Q1Q10	Q1Q11	Q1Q12	Q1Q13
Valid	Resilience													
	always true	13	35	34	11	22	9	20	21	36	30	23	16	10
	often	69	35	31	49	44	26	41	46	40	39	50	40	43
	sometimes	15	20	20	30	30	38	24	25	17	25	24	34	36
	rarely	2	9	14	8	3	22	12	6	2	4	3	10	9
	incorrect	1	1	1	2	1	5	3	2	5	2	0	0	2
Total		100	100	100	100	100	100	100	100	100	100	100	100	100

questionnaire A		Percentage												
		Q1Q1	Q1Q1	Q1Q1	Q1Q1	Q1Q1	Q1Q1	Q1Q2	Q1Q2	Q1Q2	Q1Q2	Q1Q2	Q1Q2	Q1Q2
Valid	Resilience													
	always true	5	31	15	28	16	7	2	6	16	9	19	30	
	often	46	41	54	42	36	47	21	23	43	31	39	43	
	sometimes	36	23	25	23	35	32	43	39	25	38	29	23	
	rarely	10	3	6	6	12	13	28	28	10	15	10	4	
	incorrect	3	2	0	1	1	1	6	4	6	7	3	0	
Total		100	100	100	100	100	100	100	100	100	100	100	100	

Table3- Frequency distribution of the anxiety of coronavirus disease questionnaire

questionnaire B		Percentage												
Anxiety of coronavirus disease		Q2Q1	Q2Q2	Q2Q3	Q2Q4	Q2Q5	Q2Q6	Q2Q7	Q2Q8	Q2Q9	Q2Q10	Q2Q11	Q2Q12	Q2Q13
Valid	always true	8	8	12	12	10	8	28	4	5	5	4	5	4
	often	16	15	25	16	16	18	36	8	12	11	10	6	7
	sometimes	54	49	42	41	44	32	30	37	46	20	13	18	23
	never	22	28	21	31	30	42	6	51	37	64	73	71	66
	Total	100	100	100	100	100	100	100	100	100	100	100	100	100

questionnaire B		Percentage												
Anxiety of coronavirus disease		Q1Q14	Q1Q15	Q1Q16	Q1Q17	Q1Q18								
Valid	always true	4	6	4	7	6								
	often	5	8	14	7	7								
	sometimes	17	18	18	21	23								
	never	74	68	64	65	64								
	Total	100	100	100	100	100								

Description: The respondents of the resilience and coronavirus anxiety questionnaire were the same.

- Q1Q1: When a change occurs, I can adapt to it.
- Q1Q2: There is at least one person with whom I have a close and intimate relationship during times of stress.
- Q1Q3: When there is no clear solution to my problems, sometimes God or destiny can help.
- Q1Q4: I can think of a solution to everything that comes my way.
- Q1Q5: The successes I have had in the past have given me so much confidence that I can deal with the challenges and problems ahead.
- Q1Q6: When I face problems, I try to see the funny side of them.
- Q1Q7: The need to cope with stress makes me stronger.
- Q1Q8: Usually after illness, injury and other hardships, I go back to normal.
- Q1Q9: I believe that there is a reason for every good or bad event.
- Q1Q10: I try my best in everything and I don't care about the result.
- Q1Q11: I believe that despite the obstacles, I can achieve my goals.
- Q1Q12: I do not despair even when things get frustrating.
- Q1Q13: In times of stress and crisis, I know where to turn for help.
- Q1Q14: When I'm under pressure, I do not lose my focus and I think right.
- Q1Q15: I prefer to solve my own problems rather than others making all the decisions.
- Q1Q16: I will not be easily discouraged if I fail.
- Q1Q17: When I'm dealing with the challenges and problems of life, I consider myself a capable person.
- Q1Q18: If necessary, I can make difficult and unexpected decisions that affect others.
- Q1Q19: I can control unpleasant emotions such as sadness, fear and anger.
- Q1Q20: In dealing with life's problems, sometimes it is necessary to act solely on speculation.
- Q1Q21: I have a strong sense of purpose in life.

Q1Q22: I feel, I'm in control of my life.
Q1Q23: I like the challenges of life.
Q1Q24: I strive to achieve my goals, regardless of the obstacles ahead.
Q1Q25: I'm proud of myself for my progress.
Q2Q1: Thinking about Corona makes me anxious.
Q2Q2: I feel tension when I think about the Corona threat.
Q2Q3: I am very concerned about the outbreak of the Coronavirus.
Q2Q4: I'm afraid to be infected with the coronavirus.
Q2Q5: I think I might get the coronavirus at any moment.
Q2Q6: At the slightest sign I think I have the coronavirus disease and check myself.
Q2Q7: I'm worried about the transmission of coronavirus to those around me.
Q2Q8: Coronavirus anxiety has disrupted my activities.
Q2Q9: Media attention to the Coronavirus worries me.
Q2Q10: Thinking about the Coronavirus has disturbed my sleep.
Q2Q11: Thinking about the Coronavirus has made me lose my appetite.
Q2Q12: I get a headache when I think of the Coronavirus.
Q2Q13: My body trembles when I think of the Coronavirus.
Q2Q14: When I think of the Coronavirus, I get goosebumps.
Q2Q15: The Coronavirus has become a nightmare for me.
Q2Q16: My physical activity is reduced due to fear of the Coronavirus disease.
Q2Q17: It is difficult for me to talk about the Coronavirus with others.
Q2Q18: I get a heartbeat when I think about the Coronavirus.

According to the table of frequency of the resilience questionnaire, it has been observed that the highest percentage of answers is related to the option 'often', among which the first question with 69% compared to other questions has the highest answer in the option 'often'. Respondents to questions 6, 20, 21, and 23 have chosen the 'sometimes' option more. In the second question, the percentage of the answer with the options 'always right' and 'often' are equal and it is 35%. However, in the Anxiety questionnaire, which measures coronavirus disease anxiety, respondents in questions 6, 8, and 10 to 18 have chosen the 'never' option more than the other options, and in questions 1 to 5 And 9 'sometimes' option and in question 7 'often' option have a higher percentage of answers than other options.

DISCUSSION AND CONCLUSION

The aim of this study was to investigate the correlation between resilience and coronavirus disease anxiety in nurses of Hazrat Ali Asghar Hospital in 2020. The results showed that there is no significant correlation between these two variables; In fact, the obtained correlation coefficient, which shows the number 0.018, indicates a weak correlation. Given the average of all variables, it could be concluded that fewer people have the anxiety of coronavirus disease. Also, it has been observed that there was a significant relationship between the characteristics of demographic factors and the resilience and Coronavirus disease anxiety, which means that factors such as gender, age, etc. affect the anxiety of COVID-19 and resilience. In the results of this study, the sample size was 100 people. Respondents may have answered the questionnaires at the appropriate or inappropriate time. On the other hand, the number obtained in Pearson's correlation coefficient was very close to being significant, thus, the significance is not completely ruled out. In addition, the results of coronavirus disease anxiety and resilience were more related to demographic factors such as educational level, age, and gender of individuals. It could be said that the higher the level of education of individuals, the more cautious they are

in dealing with COVID-19 patients. This may be due to differences between the sexes in views and methods of problem-solving; In most sources, the relationship between these two variables has been ignored.

Some variables were of special importance in terms of risk factors and resilience factors, including adjustment characteristics, the role of work, years of work experience, social and work support, job organization, quarantine, age, gender, marital status, and methods of coping with problems. Responsibility of these factors is greatly important when planning effective intervention strategies, enhancing resilience, and reducing the risk of adverse mental health consequences, among health care providers facing the COVID-19 pandemic³⁹. Among 176 corona disease ward nurses, 77.3% (176/136) were anxious. Mild to moderate anxiety symptoms and severe anxiety symptoms were observed in 27.3% and 25% of nurses, respectively. Gender, work experience and time of care were the main factors affecting the feelings of clinical nurses⁴⁰. However, in the present study, the hospital was not the main center for the admission of corona patients and the number of corona patients was less, therefore the nurses showed less anxiety.

There are several characteristics that improve resilience, including emotional intelligence, empathy, and mindfulness⁴¹. Nurses often expressed feelings of tiredness, helplessness, and sadness, while others reported being grateful to their teams⁴²; In this hospital, people also work in the form of friendly teams and have more empathy with each other.

Rubin et al. study, most people that were exposed to very challenging or traumatic events, had flexible resilience and did not suffer from long-term negative psychological effects⁴³. Also, Quinn states that some people would suffer, but in most cases, these symptoms resolve without the need for formal interventions⁴⁴, which in this study, people did not show any specific symptoms of anxiety.

In a study of 325 nurses, the results showed that coronavirus disease may cause dysfunction and anxiety in nurses. Increased levels of personal resilience, social

support, and organizational support were associated with decreased levels of corona pandemic anxiety. Nurses' resilience in the study was moderate⁴⁵. Communities must use the necessary facilities and strategies to prevent employees from tiredness or illness. These include providing mental health care, ensuring the safe use of personal protective equipment to prevent employees from becoming infected and maintaining a healthy work environment⁴⁶. Providing maximum safety and meeting the physiological needs of nurses in the workplace, as well as basic protection and support mechanisms to prevent nurses from infection, energy failure and burnout, are essential¹². In this study, support facilities for nurses in all wards were provided.

The results of the studies indicate that the prevalence of the disease leads to other health problems such as stress, anxiety, depressive symptoms, insomnia, denial, anger, and fear worldwide. Social concerns affect daily behaviors, economics, prevention and decision-making strategies of policymakers, health organizations and health centers, which could weaken coronavirus control strategies and lead to more complications and mental health needs worldwide⁴⁷. A new study in Wuhan, China, found that women, nurses, and health care workers were particularly prone to depression, anxiety, insomnia, and distress²⁵, but in the present study, the number of patients admitted to pediatric wards, due to the epidemic of coronavirus, has decreased and most of the patients have been treated on an outpatient basis. As a result, the workload of nurses has been less and all support and protection measures have been provided to the staff.

Huang's study demonstrated that the resilience of medical staff in radiology departments was generally low during the new Coronavirus outbreak. The results showed that the resilience of female medical staff in radiology departments was significantly lower than male medical staff⁴⁸. Another study showed that women have higher stress and women's resilience has less effect on their psychological distress than men's resilience on their psychological distress⁴⁹. In this study, women also showed a greater sense of responsibility in the face of the coronavirus disease. Jafar Jalal et al. in 2019 conducted a study to determine the secondary traumatic stress and resilience of nurses working in psychiatric wards in Tehran. The results of the study showed that the mean of secondary traumatic stress of nurses participating in this study was mild to moderate and their resilience was higher than the mean score of the instrument²⁰.

In 2017, Omid et al. conducted a study under the title of the study of the relationship between nurses' job stress and resiliency in Kermanshah. The study was a descriptive correlational study and was performed on 156 employed nurses and the results showed that the average job stress of nurses was moderate and equal to 3.02 and the average resilience was equal to 3.11. There was a strong and significant correlation between resiliency and job stress of nurses. Considering that resilience is one of the predictors of prevention and reduction of burnout in nurses, it is suggested that resilience training and its predictors be included in nursing educations⁵⁰. The results obtained in this article are not the same as the present study, while there was no significant correlation between the two

variables of anxiety and resilience. In fact, the obtained correlation coefficient, which shows the number 0.018, indicates a weak correlation, that in the present study, the results may have been affected by the number of samples (100 people).

Many communities have aimed to increase the resilience of infrastructure and public services as well as the resilience to economic shocks and disasters. Therefore, the resilient urban form is claimed as a new approach to incorporate resilience and flexibility⁵⁵. Health care workers in Wuhan were under moderate to severe stress at the peak of the outbreak, and many reported severe anxiety and depression. Wuhan Health Care staff showed greater vulnerability to stress and depression. Limitations of this study included relatively small sample size and data collection by following up on telephone calls, and participants, who were health care personnel, were selected from two different hospitals⁵¹. Given that the sampling environment of the present study was only one hospital, that was not a corona admission center, and the policies and support of the hospital may play a role in anxiety and resilience.

Savitsky's study has shown high anxiety in nursing students in the coronavirus pandemic⁵², which is not consistent with the results of the present study, while insecurity, fear of possible harm, and instability of students may affect their anxiety.

In another study, medical staff at the frontline against the coronavirus showed symptoms of high anxiety and depression, and adopting positive resilience styles helped them improve their negative emotions⁵³. Medical staff in China, who encountered patients with COVID-19 in January and February of 2020, described anxiety, stress, and self-efficacy as dependent on sleep quality and social support⁵⁴. In the present study, the low number of hospitalizations, fewer shifts, hospital support, and 14-day rest of the staff may play a role in their resilience and anxiety.

Considering that Hazrat Ali Asghar Hospital is a children's hospital and has a smaller number of children with Corona disease, nurses in children's hospitals are less prone to the anxiety of Corona disease. The results showed that there is no significant correlation between these two variables. In fact, the obtained correlation coefficient, which shows the number 0.018, indicates a weak correlation. According to nurses, when there is no clear solution to problems, sometimes God and destiny help people. They rely on God first of all. Considering the mean of all variables, it could be concluded that there was a significant relationship between the characteristics of demographic factors and the resilience and Coronavirus disease anxiety, which means that factors such as gender, age, etc. affect the anxiety of COVID-19 and resilience.

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