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RESEARCH ARTICLE

THE EFFECT OF CORONAVIRUS PERCEPTIONS AND ATTITUDES OF PEDIATRIC NURSES ON QUALITY OF LIFE

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ABSTRACT

Purpose: This cross-sectional study aims to explore the effect of pediatric nurses' perceptions and attitudes of coronavirus on their quality of life.
Material and Methods: It was carried out between the dates of June-August, 2021. The sample of the study consisted of 80 pediatric nurses working in the pediatric clinics of a university hospital. “Perceptions and Attitudes Evaluation Scale towards the COVID-19 Pandemic” and "WHOQOL-BREF-TR Scale" were used to collect data which were collected by online survey method. Reporting is consistent with the STROBE checklist for cross-sectional studies.
Results: It was determined that the mean score of the psychological and social domains of the quality of life of the pediatric nurses was at a moderate level, while the mean scores of the physical and environmental domains were found to be below the medium level. According to the results of the regression analysis, the nurses' coronavirus perception and attitude sub-dimensions of dangerousness, macro, cognitive avoidance, common area avoidance and personal contact avoidance scores explained 30% of psychological domain scores, and macro and common area avoidance sub-dimension scores explained 25% of social domain scores, macro and complo sub-dimensions scores explained 22% of environmental domain scores.
Conclusion: As a result, it was determined that pediatric nurses' perceptions and attitudes towards coronavirus effect their quality of life. In order to increase the quality of life of pediatric nurses, attempts should be made to help nurses in the conditions of the COVID-19 pandemic and to provide necessary protection conditions to minimize the physical, psychological, social, and environmental effects of the pandemic.

Keywords: COVID-19, nurse, pediatrics, perception, attitude, quality of life

INTRODUCTION

COVID-19 infection originating from the New Type Coronavirus (SARS-CoV-2) emerged in the city of Wuhan, China in late December 2019 and became effective all over the world, especially in European countries, in a short time. This disease, which affects the whole world, is a serious and fatal disease with different symptoms, such as fever, cough, and respiratory distress (1). The World Health Organization declared COVID-19 a pandemic on March 11. The first COVID-19 case in our country was announced by the Ministry of Health on March 11, 2020 (2). 4,592,934 people worldwide (3) and 52,860 people in Turkey (4) have lost their lives due to Covid-19. Deaths are still continuing. The COVID-19 pandemic has significantly affected nursing services management and patient care processes. The pandemic infected many people in need of medical

treatment, and the crisis of qualified human resources increased the workload of all health professionals, especially nurses (5). As the COVID-19 disease spread, there was an urgent need for healthcare and hospital resources. The fact that a large number of patients are infected in a very short time and receive treatment at the hospital and especially the need for intensive care has revealed the importance of the concept of "care", which is the main purpose of nursing. In this process, nurses served on the front line in a therapeutic role, caring for patients in complicated COVID-19 cases requiring hospitalization (6).

The fact that COVID-19 is a contagious and dangerous disease brings with it negativities such as the fear of death of nurses, the responsibility of treating individuals infected with the virus, and witnessing the loss of their relatives as a result of the pandemic, as in all healthcare professionals. All these situations make nurses' daily lives difficult and may cause traumas that will last for many years. In addition, all health workers, including nurses, had to be separated from their families and children in this process (7, 8). Management of the pandemic process is very difficult for nurses.

The fact that COVID-19 is asymptomatic in children, but they are carriers, makes the nurses working in the pediatric service uneasy. On the other hand, when the COVID-19 pandemic was first announced, it was known that this disease progressed as symptomless or with mild symptoms in children. However, in April 2020, it was determined that a serious condition similar to Kawasaki disease or toxic shock syndrome occurred after Acute COVID-19 disease, which was reported from the UK National Health Service and then from Italy, and seen under 21 years of age (9). This condition in children was characterized by severe abdominal pain, fever, mucocutaneous disease (rash, conjunctivitis, oral lesions, oedema in the extremities, coronary artery enlargement, and gastrointestinal symptoms). As a result of similar cases in various countries, this situation was named "Multisystem Inflammatory Syndrome in Childhood (MIS-C)" by the Center for Disease Control and Prevention (CDC). It was determined that there was a delay of several weeks between the period when the number of COVID-19 cases was highest and the period when the number of MIS-C cases was highest. This situation was accepted as a complication related to COVID-19 (10). Therefore, while COVID-19 disease increased the workload of nurses working in adult clinics, MIS-C cases started to increase the intensity in pediatric services. As a result, it is known that the effects of the COVID-19 pandemic are seen in all areas of nursing, and it is seen that it affects not only adult nurses but also pediatric nurses.

It is also important to determine the perceptions and attitudes of pediatric nurses towards coronavirus. Because nurses' perceptions and attitudes towards this disease have an effect on many factors. In particular, it is thought that these perceptions and attitudes will affect the quality of life of pediatric nurses. In this direction, this study was planned to evaluate the effect of pediatric nurses' perceptions and attitudes toward coronavirus on their quality of life.

Quality of life is an important phenomenon for all individuals. It is the determinant of the health status of individuals and interacts with people's expectations, living standards and concerns. Therefore, determining to what extent the quality of life of pediatric nurses struggling with the pandemic is affected and the impact of pediatric nurses' perceptions and attitudes on the quality of life of pediatric nurses constitute the importance of the research. When the literature is examined, the fact that the effect of pediatric nurses' perceptions and attitudes toward coronavirus on their quality of life has not been examined before constitutes the original value of our research.

MATERIAL AND METHODS

The research was conducted in descriptive and cross-sectional type to evaluate the effect of pediatric nurses' perceptions and attitudes toward coronavirus on their quality of life between June and August 2021. Reporting is consistent with the STROBE checklist for cross-sectional studies.

Population

The population of the study consisted of a total of 101 pediatric nurses working in pediatric surgery, general pediatrics, pediatric infection, pediatric hematology-oncology, neonatal intensive care, pediatric side branch, pediatric intensive care and pediatric emergency departments of a university hospital. The sample of the study consisted of 80 pediatric nurses who voluntarily agreed to participate in the study. In this direction, 79.2% of the population has been reached. In the power analysis made as a result of the study using the G-Power 3.1.9.4 program

posterior power when α=0.05, β=0.06 our analysis result was found to be 76%.

Acceptance Criteria for the Participants of the Research Study

• Working in pediatric clinics during the pandemic period

• To participate in the research study voluntarily

Data Collection

An online survey method was used for data collection in the research. Data collection tools used in the research:

Descriptive information form: In this form, there are 9 questions including gender, age, education level, working time in the profession, clinic, working time in the current clinic, marital status, having a child, living with a chronic disease or elderly person.

Perceptions and Attitudes Evaluation Scale towards the COVID-19 Pandemic: The scale adapted by Artan et al. (2020) consists of 4 subscales and all of them are scored separately. All scales are in a 5-point Likert type, and high scores obtained from the scales mean that the belief in that area is high. The scales include the general perception of the disease, the causes of the disease, and the perception of control and avoidance behaviors. General Perception (perception of illness), Causes and Perception of Control Scales are in 5-point Likert type, where markings can be made between “1- Strongly Disagree” and “5-Strongly Agree”. The subscale of the questionnaire, which evaluates the general perception of the disease, consists of 8 items covering the sub-dimensions of "contagiousness" and "danger". The second 18-item subscale (Reasons) evaluates the factors causing the disease. It consists of conspiracy, environment and belief sub-dimensions. The conspiracy sub-dimension evaluates a perception that includes statements of belief that the coronavirus was created with some kind of conspiracy motivation. The environment sub-dimension evaluates the perception that the disease occurs due to environmental reasons. The belief sub-dimension measures the level of basing the disease on religious grounds. The next subscale (Control) evaluates the perception of control towards the disease and consists of 13 items. High scores obtained from the perception of control scale indicate a positive picture, which indicates that the perception of control is high. There are sub-dimensions of macro control, personal control and inevitability. All statements in the inevitability sub-dimension require reverse coding, and high scores in this sub-dimension indicate that the person has a high belief that he or she can avoid the disease. The subscale evaluating avoidance behaviors were “I have never done this behavior.” and “I have done this behavior too often.” It consists of 14 statements of 5-point Likert type, including options. The sub-dimensions of this scale are cognitive avoidance, avoidance of common areas, and avoidance of personal contact (11).

WHO Quality of Life Scale Short Form Turkish Version (WHOQOL-BREF-TR Scale): The scale, developed by WHO and validated and found reliable by Eser et al. (1999), has two forms, long and short. The short form will be used in this study. The scale is divided into 4 sub-dimensions as physical, psychological, social and environmental well-being and consists of 27 items. The physical domain has items related to the ability to carry out daily activities, dependence on drugs and treatment, vitality and exhaustion, bodily mobility, pain and discomfort, sleep and rest, and the ability to work. The psychological domain has items related to body image and appearance, negative emotions, memory, and concentration. The social domain has items related to relationships with other people, social support, and sex life. The environmental domain has items related to financial resources, physical security, access to health services, home environment, an opportunity for rest and leisure time, physical environment, and transportation. A total score for the scale is not calculated, and the score of each sub-dimension is evaluated over 100 or 20. In this study, scores were calculated out of 100. An increase in the scores obtained from the sub-dimensions indicates an increase in the quality of life. The Cronbach's Alpha values of the scale are 0.83 in the bodily domain sub-dimension, 0.66 in the psychological domain sub-dimension, 0.53 in the social domain sub-dimension, and 0.73 in the environmental domain sub-dimension (12).

Research Model

The model of the research is presented in Figure 1.

Statistical Analysis

Skewness and kurtosis values were between +1/-1 in our study, and the distribution was accepted as normal in the evaluation of the data. The data showed normal distribution. In this direction, Pearson correlation analysis and linear regression analysis were performed in the study. The criterion of $p<0.05$

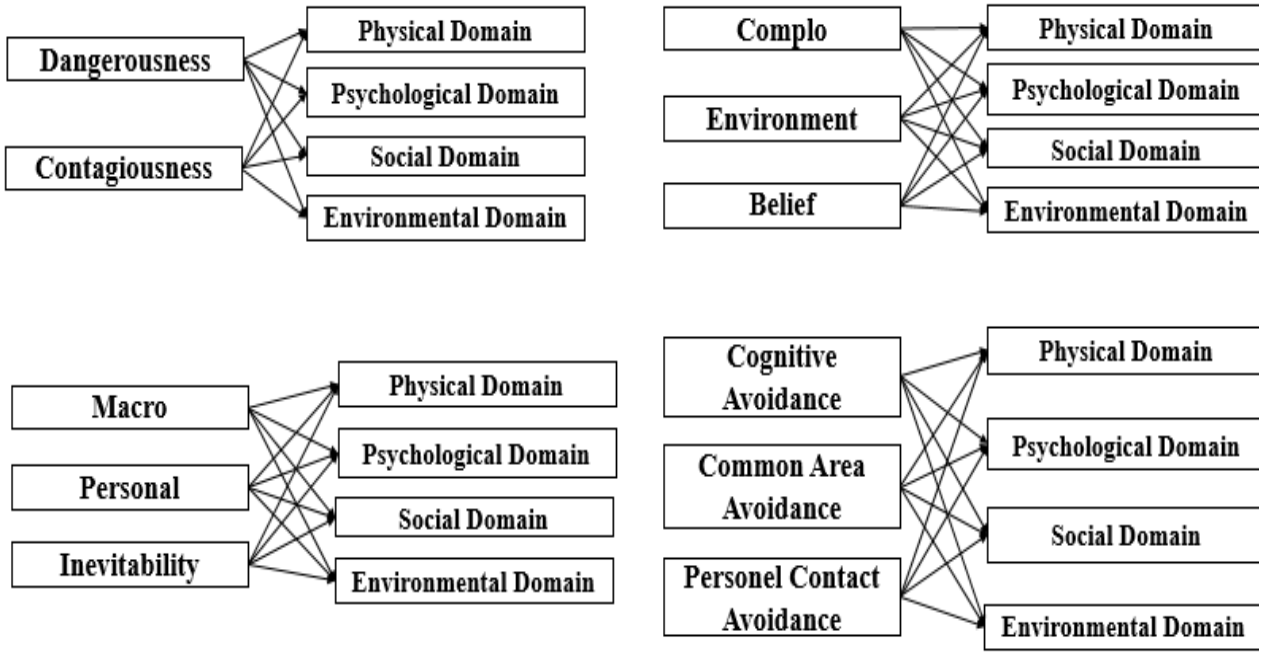

Figure 1. Research Model

was taken into account to determine the significant difference (13). While interpreting the correlation coefficients, values between 0.00–0.10 are interpreted as negligible correlation; values between 0.10–0.39 indicate weak correlation; values between 0.40–0.69 are interpreted as moderate correlation, values between 0.70–0.89 show a strong correlation and values between 0.90–1.00 indicate very strong correlation (14). In addition, descriptive statistics such as percentage, frequency, mean and standard deviation were also included. There was no missing data in the Research. 80 nurses were included in the analyses.

Compliance with Ethical Standards

In order to carry out the research, firstly, the permission of the Ministry of Health dated 18.04.2021 was obtained, and then the ethics committee (Health Sciences University Kanuni Training and Research Hospital Clinical Research Ethics Committee) approval numbered 23618724 was obtained on 10.06.2021.

RESULTS

90% of the pediatric nurses participating in the study are women, 67.5% hold bachelor's degree, 55% are between the ages of 21-30, and 73.8% are working as pediatric nurses between 1-5 years. 32.2% of the nurses are working in the neonatal intensive care unit, 16.3% in the pediatric service, 13.8% in the pediatric intensive care unit, 12.5% in the pediatric hematological oncology service, 7.5% in the pediatric minor, 6.3% in the pediatric surgery, 6.3% in pediatric infections, and 5.1% in the pediatric emergency department. 56.2% of the nurses are married, 45.0% have children, and 16.3% live with an elderly or chronically ill individual (Table 1).

The mean score regarding pediatric nurses perception of disease was 2.65±0.63, while mean score was 1.89±0.58 for sub-dimenson of dangerousness and 3.65±1.10 for sub-dimension of contagiousness. The mean score regarding pediatric nurses perception of causes was 2.72±0.70, while the mean score was 3.00±1.01 for sub-dimenson of complo, 2.58±0.91 for sub-dimension of environment and 2.55± 0.97 for subdimension of belief. The mean score regarding pediatric nurses perception of control was 2.80±0.56, while the mean score was 2.50±0.95 for sub-dimenson of macro, 2.97±0.85 for sub-dimension of personal and 3.00±0.52 for subdimension of inevitability. The mean score regarding pediatric nurses avoidance behaviors was 2.69±0.77, while the mean score was 2.17±1.04 for sub-dimenson of cognitive avoidance, 2.62±0.85 for sub-dimension of common area avoidance and 3.83±1.31 for subdimension of personal contact avoidance. When the mean score of quality of life was examined; physical domain is 49.86±13.73,

Table 1. Distribution of descriptive characteristics of pediatric nurses

Characteristics	n	%
Gender		
Famale	72	90.0
Male	8	10.0
Education Status		
Health vocational high school	20	25.0
Bachelors degree	54	67.5
Master or PhD graduate	6	7.5
Age Range		
21-30	44	55.0
31-40	26	32.5
41-47	10	12.5
The average age: 30.98±7.28		
Working Time in the Profession (year)		
1-5	35	43.8
6-10	15	18.8
11-20	24	30.0
21-28	6	7.4
Average Working Time in the Occupation: 9.38±6.62		
Working Time as a Pediatric Nurse (year)		
1-5	59	73.8
6-10	10	12.4
11-20	9	11.3
21-26	2	2.5
Average Working Time as a Pediatric Nurse:5.22±5.04		
Clinic		
Neonatal Intensive Care	26	32.2
Child Service (general)	13	16.3
Pediatric Intensive Care	11	13.8
Pediatric Hematology-Oncology	10	12.5
Pediatric Side Branch	6	7.5
Pediatric Surgery	5	6.3
Child Infection	5	6.3
Child Emergency	4	5.1
Marital Status		
Married	45	56.2
Single	35	43.8
Status of Having a Child		
Yes	36	45.0
No	44	55.0
Living with an Elderly or Chronically Diseased Individual		
Yes	13	16.3
No	67	83.7
Total	80	100.0

psychological domain is 51.25±17.68, social domain is 50.62±22.17 and environmental domain is 47.77±15.85 (Table 2).

When Table 3 is examined, a positive moderate and statistically significant correlation was detected (r=0.665; p=0.043) between the dangerousness sub-dimension and the quality of life psychological domain. A positive moderate and significant correlation was seen between the perception of control total scale score and the quality of life psychological domain (p=0.409; p=0.005). A positive moderate significant correlation was found between the macro sub-dimension and and the quality of life psychological domain (r=0.584; p=0.011) (Table 3).

A negative moderate significant correlation was detected between the cognitive avoidance sub-

Table 2. Distribution of pediatric nurses' mean scores of coronavirus perception and attitude scales and sub-dimensions and quality of life scales

Scales and Sub-dimensions	x̄	Sd.
Disease Perception	2.65	0.63
Dangerousness	1.89	0.58
Contagiousness	3.65	1.10
Perception of Causes	2.72	0.70
Complo	3.00	1.01
Environment	2.58	0.91
Belief	2.55	0.97
Perception of Control	2.80	0.56
Macro	2.50	0.95
Personal	2.97	0.85
Inevitability	3.00	0.52
Avoidance Behaviors	2.69	0.77
Cognitive Avoidance	2.17	1.04
Common Area Avoidance	2.62	0.85
Personal Contact Avoidance	3.83	1.31
Physical Domain	49.86	13.73
Psychological Domain	51.25	17.68
Social Domain	50.62	22.17
Environmental Domain	47.77	15.85

dimension (r=-0.466; p=0.017) and quality of life psychological domain. Apositive and weak significant correlation was seen between common area avoidance (r=0.229; p=0.041) and quality of life psychological domain. A positive and weak significant correlation was found between personal contact avoidance (r=0.259; p=0.020) and the quality of life psychological domain (Table 3).

A positive moderate and significant correlation was found between the perception of control total scale score (r=0.415; p=0.002), macro sub-dimension (r=0.599; p=0.001), common area avoidance (r=0.490; p=0.027) and quality of life social domain score (Table 3).

There was a negative weak and statistically significant correlation was found between the complo sub-dimension and the environmental domain score (r=-0309; p=0.006), positive moderate and significant correlation was detected the total score of perception of control and the environmental domain score (r=0.545; p=0.002), positive moderate and significant correlation was found between macro sub-dimension and environmental domain (0.434; p=0.002) (Table 3).

According to the regression analysis result in Table 4, when the significance level corresponding to the F value is considered, it is seen that the model is statistically significant (F=6.088; p<0.001). The sub-dimensions of dangerousness, macro, cognitive avoidance, common area avoidance and personal contact avoidance, which are the sub-dimensions of the coronavirus perception and attitude scale of nurses, explain 30% of the quality of life psychological domain scores. Among these variables, it was observed that the cognitive avoidance sub-dimension made the highest contribution with Beta=-0.34. However, other variables were also found to have a statistically significant contribution (Table 4).

According to the regression analysis result in Table 5, when the significance level corresponding to the F value is considered, it is seen that the model is statistically significant (F=7.760; p=0.001). Nurses' scores in the macro and common area avoidance sub-dimensions of the coronavirus perception and attitude scale explain 25% of the social domain scores of quality of life. Among these variables, it was seen that the macro sub-dimension made the highest contribution with Beta=-0.40. However, it was determined that the sub-dimension of common area avoidance also provided a statistically significant contribution.

According to the regression analysis result in Table 6, when the significance level corresponding to the F value is considered, it is seen that the model is statistically significant (F=11.183; p<0.001). Macro and complo of nurses' coronavirus perception and attitude scale sub-dimensions explain 22% of environmental domain quality of life scores. Among these variables, it was seen that the macro sub-dimension made the highest contribution with Beta=-0.36. However, the conspiracy sub-dimension was also found to provide a statistically significant contribution.

DISCUSSION

The fact that every individual in the society is at risk for COVID-19, having a chronic disease, witnessing the loss of their relatives due to COVID-19 and not having enough information about COVID-19 has created anxiety in all individuals (15). Since the first day of the pandemic, problems such as fear, panic, anxiety, insecurity, helplessness, stress, depression have emerged in people due to situations such as death, the high number of patients in intensive care and intubated, and the comments made (16, 17). It is stated that all these symptoms are related to the individual's perception of illness (18). The fact that the mean score of dangerousness sub-dimension in the

Table 3. Distribution of the Relationships between Pediatric Nurses' Coronavirus Perceptions and Attitudes Sub-Dimensions and Mean Scores of Quality of Life

Coronavirus Perceptions and Attitudes Sub-Dimensions		Quality of Life			
		Physical Domain	Psychological Domain	Social Domain	Environmental Domain
Disease Perception	**r**	-0.058	0.133	0.062	-0.095
	p	0.608	0.240	0.586	0.404
Dangerousness	**r**	0.159	0.060	0.007	0.003
	p	0.158	0.599	0.948	0.980
Contagiousness	**r**	-0.114	**0.665**	0.084	-0.079
	p	0.312	**0.043**	0.459	0.487
Perception of Causes	**r**	0.075	0.063	-0.051	-0.144
	p	0.508	0.577	0.653	0.203
Complo	**r**	-0.029	0.026	-0.146	**-0.309**
	p	0.798	0.819	0.199	**0.006**
Environment	**r**	0.084	0.033	-0.020	-0.074
	p	0.456	0.770	0.859	0.513
Belief	**r**	0.150	0.106	0.098	0.146
	p	0.185	0.349	0.388	0.196
Perception of Control	**r**	0.132	**0.409**	**0.415**	**0.545**
	p	0.244	**0.005**	**0.002**	**0.002**
Macro	**r**	0.125	**0.584**	**0.599**	**0.434**
	p	0.270	**0.011**	**0.001**	**0.002**
Personal	**r**	0.118	0.168	0.236	0.210
	p	0.299	0.137	0.035	0.061
Inevitability	**r**	-0.011	0.168	0.168	0.111
	p	0.923	0.137	0.137	0.327
Avoidance Behaviors	**r**	0.001	0.031	-0.003	-0.055
	p	0.993	0.787	0.981	0.629
Cognitive Avoidance	**r**	-0.146	**-0.466**	-0.158	-0.182
	p	0.197	**0.017**	0.162	0.105
Common Area Avoidance	**r**	0.111	**0.229**	**0.490**	-0.007
	p	0.329	**0.041**	**0.027**	0.953
Personal Contact Avoidance	**r**	0.115	**0.259**	0.346	0.147
	p	0.310	**0.020**	0.096	0.193

disease perception scale of the pediatric nurses participating in our study is low and the mean score of the contagiousness sub-dimension is high indicates that the pediatric nurses find the COVID-19 disease dangerous and are aware of the contagiousness of the COVID-19 disease. Similar studies have also shown that health professionals are concerned about the dangerousness and contagiousness of the COVID-19 pandemic. In the study conducted by Kurt-Yılmaz et al. (2021) to examine the perspectives and attitudes of healthcare professionals regarding the Covid-19 outbreak, it was determined that all healthcare professionals were concerned (19). Along with increasing anxiety and fear during pandemic periods, the perception of illness and attitudes may change (6). Success in the fight against the epidemic is closely related to the compliance of individuals with the measures. Therefore, it is important to how individuals perceive the situation and their attitudes towards the control of the epidemic. In particular, the awareness of healthcare workers is very valuable in terms of both managing the epidemic and achieving success (20). In the literature, it has been determined that as the level of disease perception regarding COVID-19 increases, the level of anxiety decreases (18, 21). In the study conducted by Al-Dossary et al. (2020), it was determined that nurses who were aware of the COVID-19 pandemic applied protection measures more successfully (22). In a similar study conducted by Arslanca et al. (2021), it was stated that there was a positive correlation between the knowledge scores of health workers and preventive behaviors (23). Therefore, in our study, it is thought that the nurses pay more attention to the prevention measures from the disease, as it was determined that the pediatric

Table 4. The effects scores of dangerousness, macro, cognitive avoidance, common area avoidance and personal contact avoidance on the quality of life psychological domain score

Dependent Variable	Independent Variables	B	Sd.	Beta	t	p	VIF	F	Model (p)	R2	Durbin Watson
Quality of Life Psychological Domain	Constant	22.661	9.959		2.275	0.026	-	6.088	<0.001	0.30	1.58
	Dangerousness	1.724	3.142	0.05	0.549	0.045	1.11				
	Macro	4.908	1.916	0.26	2.562	0.002	1.11				
	Cognitive Avoidance	-5.795	1.801	-0.34	-3.217	0.002	1.19				
	Common Area Avoidance	3.295	2.460	0.16	1.339	0.025	1.49				
	Personal Contact Avoidance	4.437	1.564	0.32	2.837	0.006	1.40				

Table 5. The effects scores of macro and common area avoidance on the quality of life social domain score

Dependent Variable	Independent Variables	B	Sd.	Beta	t	p	VIF	F	Model (p)	R2	Durbin Watson
Quality of Life Social Domain	Constant	21.191	9.580		2.212	0.030		7.760	0.001	0.25	1.57
	Macro	9.303	2.421	0.400	3.843	0.000	1.00				
	Common Area Avoidance	2.344	2.685	0.091	.873	0.045	1.00				

Table 6. The effects scores of macro and complo on the quality of life environmental domain score

Dependent Variable	Independent Variables	B	Sd.	Beta	t	p	VIF	F	Model (p)	R2	Durbin Watson
Quality of Life Environmental Domain	Constant	48.72	6.31		7.711	0.000		11.183	<0.001	0.22	1.73
	Macro	6.06	1.68	0.36	3.598	0.001	1.00				
	Complo	-5.37	1.59	-0.34	-3.369	0.001	1.00				

nurses were aware of the dangerousness and contagiousness of the epidemic. This situation is great importance in terms of the recent occurrence of MIS-C in pediatric patients. In addition, it is an important finding that nurses are aware of the contagiousness and dangerousness of the disease, considering that although the pediatric patient group has COVID-19 disease without symptoms, their carrier status may be high.

In our study, it was determined that the complo sub-dimension scores of the nurses were higher than the environment and belief sub-dimension scores. This result suggested that the nurses thought that a significant level of COVID-19 disease spread to the world as a result of a complo. Nurses may be affected by sources internet, television etc. Because it is discussed that this disease may have emerged as a result of a complo in many programs, news on television and internet resources. Pandemics are periods when public trust is irreparably weakened in the long run. People may have a problem of trust in individuals and society, with the concern of how and from whom the disease will infect them. Many conspiracy theories, such as the fact that the COVID-19 pandemic was a planned experiment, that the virus was produced in a laboratory environment, that it was deliberately made to reduce the world population, came to the fore especially in social media. World Health Organization; He described this epidemic of misinformation, which caused the spread of misinformation, disinformation, and conspiracy theories, as “infodemic” (24). The rapidly spreading conspiracy theories and misinformation have revealed a threat that can directly affect human health. Deaths have occurred due to misinformation and underestimation of the disease, or due to incorrect prevention and treatment practices (25). However in the study, it is seen that the mean score of the environment sub-dimension, which indicates that the disease occurs due to the influence of the environment, and the sub-dimension of belief, which states that the disease occurs as a result of the punishment of God, is also higher than the average score. In this respect, it is seen that pediatric nurses

think that both conspiracy, environment and belief factors are effective among the perceptions of the emergence of COVID-19 disease. It is thought that the nurses' thinking that environmental factors play a role in the spread of the disease may also be related to the news about the spread of the disease, especially as a result of bat consumption in the internet and television news. In addition, we think that their evaluation of the emergence of the disease as a punishment from God stems from their spiritual characteristics.

In our study, it is seen that the mean score of the inevitability sub-dimension of the perception of control scale, which expresses the controllability of the COVID-19 disease, is higher than the macro and personal sub-dimensions. This shows that nurses do not think that catching coronavirus is not inevitable. It is seen that the personal sub-dimension point averages of the nurses are above the average. While this finding imply that nurses think that they can control the disease with personal measures taken against coronavirus, the moderate macro sub-dimension scores indicate that they think that the measures taken at the national and international level are sufficient for the control of the disease. In the study of Kurt-Yılmaz et al. (2021), it is stated that healthcare professionals continue to call on the society to comply with social distance, mask use and hygiene rules (19). In this direction, when we look at the findings of our research, we see that the pediatric nurses participating in our research also attach importance to preventive measures.

In our study, it was found that the average score of the personal contact avoidance was high, while common area avoidance score was found above the average which measures the avoidance behaviors of pediatric nurses against COVID-19 disease. It was determined that the cognitive avoidance score, which expresses situations such as not reading the news about the COVID-19 disease or not talking about the disease, was below the average. These findings show that pediatric nurses' attitudes towards avoiding coronavirus are especially about avoiding personal contact and avoiding common areas. Therefore, it can be said that the pediatric nurses participating in our study acted sensitively about the prevention of coronavirus. In the literature, it is stated that individuals who experience anxiety and fear during the pandemic period show avoidance behaviors (26). In a study conducted during the previous bird flu period, it was determined that the perception of influenza epidemic, lethality and stress increased in individuals associated with bird flu, and individuals avoided using public transportation and were hesitant to go to hospitals (27). According to the results of a cross-sectional study examining psycho-behavioral changes and avoidance behaviors of individuals, it was stated that most of the participants limited their communication with people, more than three-quarters of the participants made changes in their behavior to ensure their safety, more than three-quarters of them limited their physical contact with people and reduced access to health facilities. In addition, it has been determined that the majority of individuals wash their hands more frequently and watching / listening / reading current news increases their anxiety levels, so approximately one third of the participants started to avoid it (28).

In our study, it was determined that the mean scores of the psychological and social domains of the pediatric nurses' quality of life scale were at a moderate level, while the mean scores of the physical and environmental domains were below the medium level. Although many countries especially focus on the physical effects of the COVID-19 pandemic (29,30), it is emphasized in the literature that the pandemic is adversely affected in many areas, especially the mental health of individuals (31). Considering the intense and difficult working conditions and environment of pediatric nurses, it is thought that the physical, environmental, psychological and social quality of life is affected. Therefore, the psychosocial impact of the pandemic in pediatric nurses should also be addressed.

In a study, one out of every four people stated that they needed psychological support during the pandemic process. (32). Meta-analyses reporting symptoms of post-traumatic stress and general psychological stress during the COVID-19 outbreak state that levels of both post-traumatic and psychological stress associated with COVID-19 are high, with approximately one in four adults needing mental health services during the ongoing epidemic. (33). Emerging evidence suggests that rates of post-traumatic stress and psychological stress have increased in the general population due to COVID-19. For this reason, taking measures to support the psychological health of individuals living in the community during the pandemic period will reflect positively on their behaviors towards the pandemic. In a period when the active struggle with the COVID-19 pandemic continues, it is important to determine the

awareness, perceptions and attitudes of the society towards the disease, to make the necessary arrangements, to fight the anxiety experienced and to take precautions against risk groups.

When the relationships between the sub-dimensions of the coronavirus perception and attitude scales of pediatric nurses and their quality of life are examined, it was determined that as the dangerousness sub-dimension score increased, the quality of life psychological sub-dimension scores also increased. Since the increase in the dangerousness sub-dimension score indicates that the nurses' perceptions of the dangerousness of COVID-19 are positive, it is thought that the psychological domain scores increase as the level of finding this disease dangerous decreases, which may cause them to feel better mentally. It was determined that as the nurses' macro, common areas avoidance, and personal contact avoidance scores increased, their psychological domain scores also increased. The increase in these variables may cause nurses to think positively. For this reason, it is thought that nurses feel better mentally.

In our study, it was also determined that with the increase in the cognitive avoidance sub-dimension score, the psychological domain score decreased. This suggests that behaviors such as cognitively avoiding coronavirus, staying away from conversations about coronavirus and changing the subject affect nurses mentally. It was determined that as the macro and common area avoidance sub-dimension scores of pediatric nurses increased, their social domain scores also increased. Therefore, it is thought that the quality of life in the social domain is affected because the nurses who have a high perception that macro-level measures will be sufficient and avoid common areas feel more secure socially. It was observed that as the complo sub-dimension scores of the nurses increased, the environmental area scores decreased. This situation shows that the quality of life of nurses who think that the COVID-19 disease has occurred as a result of a complo has decreased in the environmental field. Nurses with a high belief in complo may find their environment unsafe and unhealthy. Therefore, their quality of life in the environmental domain may decrease. In addition, it was determined in the study that as the macro sub-dimension scores of the nurses increased, the environmental domain scores also increased. As the nurses' perception that the measures taken at the macro level are sufficient, they will feel more secure in terms of the environment, it is thought that their environmental field scores may also increase.

According to the results of the regression analyzes conducted in our research, the dangerousness, macro, cognitive avoidance, common area avoidance and personal contact avoidance sub-dimensions of the nurses' coronavirus perception and attitude sub-dimensions explain 30% of the quality of life psychological domain scores. These variables affect the psychological domain scores statistically significantly. In this direction, it is seen that the dangerousness, macro, cognitive avoidance, common area avoidance and personal contact avoidance behaviors of nurses related to COVID-19 disease are important predictors of their psychological quality of life. However, it was determined that the variable that contributed the most was cognitive avoidance. In this direction, it is seen that the cognitive perceptions of nurses towards coronavirus significantly affect their quality of life psychological.

It was determined that nurses' scores of macro and common areas avoidance, which are sub-dimensions of coronavirus perception and attitude scale, statistically affected the social domain scores of quality of life, and it was determined that these variables explained 25% of the social domain. It was determined that the most predictive power among these variables was the macro sub-dimension. In this direction, the perception of nurses that the measures taken at the macro level, in other words, both at the national and international level, are sufficient, significantly affects the quality of life of nurses in the social domain. It was determined that macro and complo sub-dimensions, which are among the nurses' coronavirus perception and attitude scale sub-dimensions, affect the quality of life environmental domain statistically. While these variables explain 22% of the environmental domain score, it was seen that the macro sub-dimension made the highest contribution. In this direction, it is thought that the perception of nurses that macro-level measures are sufficient may cause nurses to feel safer in the environmental domain, thus affecting this area.

CONCLUSION

According to the findings of our study, it was determined that pediatric nurses were aware of the contagiousness and dangerousness of COVID-19.

They thought that the cause of the epidemic was related to complo, environmental and belief factors, and that their perceptions about controlling the epidemic would be possible by taking macro and personal precautions. In addition, it was determined that their attitudes towards epidemic avoidance behaviors were in the form of common areas avoidance and personal contact avoidance. It was determined that cognitive avoidance levels against the epidemic were low.

It was determined that the quality of life of the pediatric nurses participating in the study was moderate in the psychological and social domains, while the mean scores in the physical and environmental domains were below the medium level. In our study, it was determined that as the dangerousness, macro, common areas avoidance, and personal contact avoidance sub-dimension scores of pediatric nurses increased, the quality of life psychological domain scores also increased, and cognitive avoidance sub-dimension score increased, the quality of life psychological domain scores also decreased. It was determined that as the macro and common area avoidance sub-dimension scores of the nurses increased, the social domain scores also increased and macro sub-dimension scores increased, quality of life environmental domain also increased. It was determined that as the complo sub-dimension scores increased, the environmental domain scores decreased.

While it was determined that the nurses' sub-dimensions of coronavirus perception and attitude scale, dangerousness, macro, cognitive avoidance, common area avoidance and personal contact avoidance explained 30% of the quality of life psychological domain scores, it was determined that cognitive avoidance was the most effective of these variables. It was determined that macro and common area avoidance sub-dimension scores had a statistically significant effect on quality of life social domain scores, and it was determined that these variables explained 25% of the social domain. It was determined that the most predictive power among these variables was the macro sub-dimension. It was determined that macro and complo sub-dimensions, which are among the nurses' coronavirus perception and attitude scale sub-dimensions, affect the quality of life and environmental domain significantly. While these variables explain 22% of the environmental domain score, it was seen that the macro sub-dimension made the highest contribution. As a result, in our study, it can be said that pediatric nurses' perceptions and attitudes towards coronavirus affect their quality of life. In order to increase the quality of life of pediatric nurses, it is recommended to take initiatives to help nurses in the conditions of the COVID-19 pandemic and to provide the necessary protection to minimize the physical, psychological, social and environmental effects of the epidemic. It should not be forgotten that this epidemic affects the nursing profession as well as many occupational groups, and it is especially difficult for pediatric nurses serving in a sensitive population. In this direction, attempts should be made to increase the quality of life of pediatric nurses in all domains, and especially the psychological effects of the epidemic should not be ignored.

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