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Revealing The COVID-19 Fear, Job Satisfaction and Intolerance of Uncertainty in Clinician Nurses During the Pandemic

İlknur Demirhan * Esra Arslan Gürcüoğlu**

* Research Assistant , PhD. Aksaray University, Faculty of Health Sciences, Nursing Department,
ORCID Number: 0000-0002-6910- 9018, ilknurdemirhan88@gmail.com

** Research Assistant, PhD. Çankırı Karatekin University, Faculty of Health Sciences, Nursing Department,
ORCID Number: 0000-0002-0569-0106, esraarslangurcuoglukaratekin.edu.tr

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Abstract

Aim: This descriptive study was conducted to determine the levels of fear of COVID-19, job satisfaction and intolerance of uncertainty of clinician nurses during the pandemic.

Methods: The study was conducted online to reach clinician nurses across various provinces in Turkey, primarily due to the ongoing pandemic. Data was gathered from a total of 220 clinician nurses who took part in the study from April 30 to August 1, 2022. The data collection tools employed in the study included a Descriptive Information Form, the COVID-19 Fear Scale, the Job Satisfaction Scale, and the Intolerance of Uncertainty Scale for Clinical Nurses.

Results: The study findings indicate that the nurses in the research exhibited a fear of COVID-19 at nearly a moderate level (with an average score of 16.33 ± 5.82). Their job satisfaction was above

Corresponding author: PhD. İlknur Demirhan, AUniversity, Faculty of Health Sciences, Nursing Department, e-mail: ilknurdemirhan88@gmail.com

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the average range, with a mean score of 122.12 ± 17.53 . Additionally, the nurses displayed a moderate level of intolerance of uncertainty, as indicated by an average score of 38.55 ± 8.97 .

Conclusion: The study revealed a noteworthy positive correlation between nurses' fear of COVID-19 and their intolerance of uncertainty. However, no significant relationship was observed between job satisfaction and these factors. Nevertheless, it's important to note that variables such as age, education level, working style, and the voluntary choice of the nursing profession were found to exert significant influences on job satisfaction.

Keywords: COVID-19 Fear, Job Satisfaction, Intolerance Of Uncertainty

INTRODUCTION

The velocity of transformations during infectious disease outbreaks, such as the case exemplified by COVID-19, is well-documented to instigate a profound milieu of uncertainty, anxiety, and perturbation within the broader community (Chen et al., 2020). It is imperative to acknowledge that the uncertainty pervading the COVID-19 pandemic holds the potential to engender augmented trepidation and disquietude among individuals, particularly when it remains unmitigated and is apperceived as a pervasive hazard (Aydın and Özcan, 2021). However, it is paramount to recognize that the prevailing uncertainty, encompassing the enigmatic trajectory of the ailment, the loss of human life, the requisite practice of physical distancing, quarantine and isolation, and the imposition of stringent measures encroaching upon personal freedoms, collectively conspire to exert a deleterious impact upon the mental well-being of a considerable cross-section of the global populace. Concomitant with this pervasive uncertainty, individuals invariably undergo a state of heightened mental distress, a condition accentuated by the concomitant surge in fear and anxiety, thereby impeding their capacity to effectively navigate the labyrinthine terrain of this multifaceted crisis. (Giallonardo et al., 2020; Rettie and Daniels, 2021).

In this context, the domain of healthcare emerges as a pivotal arena of activity in the ongoing global tumult, with nurses constituting the predominant cohort within this workforce. Healthcare professionals, operating within settings of elevated vulnerability to the Coronavirus Disease-2019 (COVID-19), shoulder a prodigious burden that manifests deleterious ramifications upon their mental well-being, precipitated by the escalation of their professional obligations during this exigent epoch (Lai et al., 2019; Enli Tuncay et al., 2020). Furthermore, these health practitioners contend with not only the occupational hazards but also the ramifications of societal seclusion and discriminatory practices, both of which significantly compromise their job

satisfaction (Erkal-Aksoy and Koçak, 2020). In light of this multifaceted scenario, it becomes abundantly clear that ascertaining the levels of trepidation experienced by nurses and conducting empirical investigations aimed at ameliorating these concerns assume paramount significance. This academic endeavor stands as a linchpin for the preservation of their mental equilibrium and the delivery of superlative quality care (Vindegaard and Benros, 2020; Pakpour and Griffiths, 2020; Çayır Yılmaz and Uysal, 2021). Hence, the present study endeavors to dissect the impact of the COVID-19 pandemic on the apprehension levels, job satisfaction, and tolerance of uncertainty among healthcare practitioners. This scholarly inquiry holds profound implications, not only for the immediate present but also as a repository of knowledge that will inform the deployment of resolute solutions against potential future outbreaks.

1. RESEARCH METHODOLOGY

Type of Study: The present descriptive study was undertaken with the overarching objective of ascertaining the levels of fear pertaining to COVID-19, the job satisfaction experienced, and the degree of intolerance towards uncertainty among clinician nurses amidst the throes of the pandemic.

Population and Sample of the Study: The research was executed through the utilization of online platforms, specifically WhatsApp groups, email correspondence, and Instagram, in order to establish communication with clinician nurses hailing from diverse regions within the geographical expanse of Turkey. The data acquisition phase transpired within the time frame spanning from April 30 to August 1, 2022. The study's sample was derived from clinician nurses who, by means of online forms, affirmed their unequivocal willingness to partake in the investigation. For the collection of data, a pragmatic approach was adopted, namely the convenience sampling method, which represents a non-random sampling technique. This method was deemed appropriate in light of the prevailing risk associated with the transmission of COVID-19 infection. The study, in its purview, encompassed a cohort of 220 clinician nurses, all of whom possessed a minimum of 6 months of professional experience, were in possession of smartphones or computers, and proactively volunteered to engage in the research.

Data Collection: Introductory Information Form, COVID-19 Fear Scale, Job Satisfaction Scale for Clinical Nurses (JSS-CN) and Intolerance of Uncertainty Scale (IUS-12) were used to collect

the data.

Introductory Information Form: This form was prepared by the researchers based on the literature (Aydın and Özcan, 2021; Çayır Yılmaz and Uysal, 2021) and consisted of 14 questions to assess the sociodemographic characteristics of the nurses.

COVID-19 Fear Scale: The scale employed in this study, initially developed by Ahorsu et al. in 2020 and subsequently adapted to the Turkish context by Artan et al. in 2021, encompasses a singular dimension and is constituted of a total of 7 items. The scale adopts a 5-point Likert format, whereby respondents assign scores in the range of "1=Strongly disagree" to "5=Strongly agree" for each respective item. Consequently, the scale permits the derivation of a minimum score of 7 and a maximum score of 35, with higher scores signifying a heightened level of apprehension regarding COVID-19. It is noteworthy that the Cronbach's Alpha internal consistency coefficient of the original scale was established at 0.82. In the context of the present study, the Cronbach's Alpha coefficient was determined to be 0.88, thereby affirming the scale's commendable internal consistency and reliability.

Job Satisfaction Scale for Clinical Nurses (JSS-CN): The scale employed in this study, originally devised by Lee et al. in 2018 and subsequently subjected to Turkish validation and reliability assessments conducted by Çağan and Koca in 2020, comprises a comprehensive inventory of 33 items, distributed across six distinct sub-dimensions. Employing a 5-point Likert scale, respondents are required to indicate their agreement levels, ranging from "1 - Strongly disagree" to "5 - Strongly agree," for each individual item. The scale thus permits the accumulation of scores within the spectrum of 33 to 165, with elevated scores signifying a greater degree of job satisfaction. It is salient to note that in the original study conducted by Lee et al. (2018), the Cronbach's alpha coefficient was ascertained to be a robust 0.95. In the present study, the Cronbach's alpha coefficient was calculated to be 0.93, further attesting to the scale's commendable internal consistency and reliability.

Intolerance of Uncertainty Scale (IUS-12): The scale utilized in this investigation, originally formulated by Carleton et al. in 2007 and subsequently adapted to the Turkish context through the rigorous work of Sariçam et al. in 2014, encompasses a total of 12 items, stratified into two distinct dimensions. Employing a 5-point Likert scale, respondents are tasked with rating their perceived suitability, varying from "1=Not at all suitable for me" to "5=Fully suitable for me," for each individual item. Consequently, the scale allows for the accumulation of scores within the range of

12 to 60, with higher scores serving as an indicator of an increased proclivity toward intolerance of uncertainty. It is noteworthy that the original scale, as established by Carleton et al. (2007), exhibited a commendable Cronbach's alpha value of 0.91. In the context of this study, the Cronbach's alpha coefficient was determined to be 0.88, thereby affirming the scale's notable internal consistency and reliability.

Data analysis: Data were evaluated using the SPSS (IBM SPSS Statistics 24) package program. Frequency tables and descriptive statistics were used to interpret the findings. The suitability of the data for normal distribution was investigated via Kolmogorov-Smirnov and/or Shapiro-Wilk-W tests. "Independent Sample-t" test (t-table value) was used to compare the measurement values of two independent groups for normally distributed data; "ANOVA" test (F-table value) statistics were used to compare the measurement values of three or more independent groups. For non-normally distributed data, "Mann-Whitney U" test (Z-table value) was used to compare the measurement values of two independent groups, and "Kruskall-Wallis H" test (χ^2 -table value) statistics were used to compare three or more independent groups. The significance level was taken as $p < 0.05$.

Ethical Issues: Prior to commencing this study, the requisite approvals were diligently secured, inclusive of the ethical clearance granted by the Ethics Committee (dated 07.04.2022, Protocol No: 2022/07-09), as well as permissions for employing the designated measurement instruments. In adherence to ethical standards, an initial consent option was thoughtfully incorporated at the outset of the questionnaire, enabling the participating nurses to explicitly indicate their willingness to partake in the study. Their informed consent was subsequently acquired through an online consent mechanism.

2. FINDINGS

Descriptive information of the participants is summarized in Table 1. The mean age of the 220 nurses who participated in the study was 35.33 ± 11.48 (years) and 84 (38.2%) of them had been working for 1-5 years.

Table 1. Distribution of Nurses' Introductory Characteristics

Variable (N=220)	n	%
Age [$\bar{X} \pm S.S.$ → 35.33±11.48 (year)]		
≤24	40	18.2
25-29	75	34.1
30-34	32	14.5
≥35	73	33.2
Gender		
Female	204	92.7
Male	16	7.3
Marital status		
Married	124	56.4
Single	96	43.6
Education level		
High school	7	3.2
Associate degree	21	9.5
Bachelor science	150	68.2
Graduate science	42	19.1
Income rate		
Income less than expenses	82	37.7
Income equals expense	112	50.9
Income more than expenses	25	11.4
Nursing profession experience duration		
6-12 months	15	6.8
1-5 years	84	38.2
6-10 years	36	16.4
11-15 years	39	17.7
>15 years	46	20.9

As detailed in Table 2, it is notable that a majority of the participants, specifically 139 individuals, representing 63.2% of the cohort, reported a prior incidence of COVID-19. Furthermore, a significant proportion, encompassing 193 participants or 87.7% of the sample, expressed disturbance arising from the prevailing uncertainties surrounding the pandemic. Additionally, a considerable number of respondents, specifically 185 individuals, corresponding to 84.1% of the participants, disclosed an adverse impact on their job satisfaction amidst the pandemic.

Table 2. Distribution of Nurses' Working Characteristics

Variable (N=220)	n	%
Worked unit		
Emergency	24	10.9
Policlinic	17	7.7
Service	99	45.0
Intensive care	38	17.3
Other	42	19.1
Affiliated institution		
State/educational research hospital	185	84.1

Private hospital	7	3.2
University Hospital	28	12.7
Worked duration on the unit		
Less than 1 month	5	2.3
1 month - 6 months	44	20.0
7 months – 1 year	24	10.9
More than 1 year	147	66.8
Type of working		
Daytime shift	63	28.6
Night shift	45	20.5
Day and night shift	112	50.9
Willingly choose the profession		
Yes	169	76.8
No	51	23.2
Have had COVID-19 before		
Yes	139	63.2
No	81	36.8
Disturbing pandemic uncertainty		
Yes	193	87.7
No	27	12.3
The negative impact of job satisfaction in the pandemic		
Yes		
No	185	84.1
	35	15.9

The distribution of total and sub-dimension scores obtained from the COVID-19 Fear Scale, JSS-CN and IUS scales is given in Table 3.

Table 3. Distribution of the Mean Scores of the Scales

Scale (N=220)	Mean	Sd	Median	Min.	Max.
COVID-19 fear scale	16.33	5.82	16.0	7.0	34.0
<i>Institutional recognition and professional success</i>	31.67	6.25	32.0	16.0	45.0
<i>Contribution of the profession to individual maturation</i>	23.29	3.99	24.0	6.0	30.0
Job satisfaction scale for clinical nurses					
<i>Respect and acceptance in interpersonal relationships</i>	25.63	5.85	26.0	12.0	40.0
<i>Being aware of professional responsibility</i>	17.13	2.07	16.5	7.0	20.0
<i>Visibility of professional competence</i>	11.45	1.78	12.0	7.0	15.0
<i>Valuing the profession</i>	12.97	1.77	13.0	4.0	15.0
Total - JSS-CN	122.12	17.53	122.5	68.0	165.0
Intolerance of Uncertainty Scale					
<i>Anxiety about the future</i>	23.77	5.23	23.0	8.0	35.0
<i>Prohibitive anxiety</i>	14.78	4.81	15.0	5.0	25.0
Total – IUS-12	38.55	8.97	38.0	13.0	60.0

The findings pertaining to the comparison of scale scores based on the descriptive characteristics of the clinician nurses are succinctly summarized in Table 4. Notably, a statistically significant

difference was observed in the scores on the job satisfaction scale among clinical nurses in relation to their age groups ($F=2.696$; $p=0.047$). Subsequent to the application of Tamhane pairwise comparisons, which take into account the variance heterogeneity, to pinpoint the source of this significant difference, it was established that a significant distinction existed between individuals in the age group of ≤ 24 and those within the 30-34 age bracket. In particular, it was discerned that the scores of individuals belonging to the ≤ 24 age group on the job satisfaction scale for clinical nurses were markedly higher than those recorded for their counterparts within the 30-34 age group.

A notable statistical dissimilarity was detected in the job satisfaction scale scores pertaining to clinical nurses, contingent upon their educational levels ($F=2.908$; $p=0.036$). Employing Tukey pairwise comparisons, while accounting for the homogeneity of variances, to delineate the source of this significant disparity, it was ascertained that a significant distinction emerged between clinicians holding associate's degrees and those with bachelor's degrees. More specifically, the job satisfaction scale scores among clinical nurses who held associate's degrees were markedly higher in comparison to their counterparts with bachelor's degrees.

Table 4. Comparison of Scale Scores According to Nurses' Introductory Characteristics

Variable (N=220)	n	COVID-19 fear scale		Intolerance of Uncertainty Scale		Job satisfaction scale for clinical nurses	
		$\bar{X} \pm Sd$	Median [IQR]	$\bar{X} \pm Sd$	Median [IQR]	$\bar{X} \pm Sd$	Median [IQR]
Age							
≤ 24 ⁽¹⁾	40	16.28±6.18	15.5 [7.8]	38.30±10.14	38.0 [16.8]	126.85±11.38	125.5 [13.0]
25-29 ⁽²⁾	75	15.76±4.97	15.0 [7.0]	37.92±8.95	37.0 [13.0]	120.21±16.89	120.0 [25.0]
30-34 ⁽³⁾	32	14.84±5.39	15.0 [9.5]	39.88±9.11	38.0 [9.5]	116.50±18.14	114.5 [17.8]
≥ 35 ⁽⁴⁾	73	17.60±6.43	18.0 [9.0]	38.77±8.83	39.0 [11.5]	123.97±19.89	125.0 [27.5]
Statistical analysis*		$\chi^2=5.063$		F=0.378		F=2.696	
Possibility Difference		p=0.167		p=0.769		p=0.047 [1-3]	
Gender							
Female	204	16.48±5.84	16.0 [7.0]	38.69±8.98	38.0 [12.8]	122.28±16.96	123.0 [21.8]
Male	16	14.50±5.33	14.5 [9.0]	36.88±8.88	35.0 [12.8]	120.19±24.17	115.0 [33.5]
Statistical analysis		Z=-1.192		t=0.777		t=0.340	
Possibility		p=0.233		p=0.438		p=0.738	
Marital status							
Married	124	16.44±5.97	16.0 [7.0]	38.38±8.71	37.5 [12.0]	123.20±19.17	121.0 [25.6]
Single	96	16.19±5.64	15.0 [7.0]	38.78±9.31	39.0 [13.5]	120.74±15.14	123.0 [21.5]
Statistical analysis		Z=-0.414		t=-0.329		t=1.033	
Possibility		p=0.769		p=0.742		p=0.303	
Education level							
High school ⁽¹⁾	7	16.14±4.91	14.0 [6.0]	39.29±3.90	39.0 [6.0]	124.00±28.79	125.0 [28.0]
Associate degree ⁽²⁾	21	15.95±6.16	15.0 [8.0]	39.24±7.67	38.0 [8.5]	131.05±20.22	127.0 [34.5]
Bachelor science ⁽³⁾	150	16.55±5.69	16.0 [9.0]	38.35±9.42	38.5 [13.0]	120.18±15.39	121.0 [23.0]
Graduate science ⁽⁴⁾	42	15.79±6.34	14.5 [6.5]	38.83±8.69	37.0 [13.5]	124.98±19.87	126.5 [28.5]
Statistical analysis		$\chi^2=0.958$		F=0.095		F=2.908	

Possibility Difference		p=0.811		p=0.962		p=0.036 [2-3]	
Income rate							
Income less than	82	16.35±5.64	16.0 [8.0]	39.38±9.48	39.0 [12.0]	122.12±20.24	121.0 [31.0]
expenses	112	15.96±5.86	15.0 [7.5]	38.05±8.17	38.0 [13.0]	122.55±14.94	123.0 [18.8]
Income equals	25	17.92±6.15	17.0 [8.0]	38.08±10.65	37.0 [17.5]	120.24±19.16	124.0 [25.0]
expense							
Income more than							
expenses							
Statistical analysis		$\chi^2=2.297$		F=0.554		$\chi^2=0.358$	
Possibility		p=0.317		p=0.576		p=0.836	

* “Independent Sample-t” test (t-table value) for comparison of measurement values of two independent groups in data with normal distribution; “ANOVA” test (F-table value) statistics were used to compare the measurement values of three or more independent groups. “Mann-Whitney U” test (Z-table value) for comparison of measurement values of two independent groups in non-normally distributed data; “Kruskall-Wallis H” test statistics (χ^2 -table value) were used to compare three or more independent groups.

Table 5 provides a succinct summary of the findings related to the comparison of specific work-related characteristics of the clinical nurses with their corresponding scale scores. Notably, a statistically significant difference was observed in the job satisfaction scale scores among clinical nurses, contingent upon their work schedules ($F=4.708$; $p=0.010$). Utilizing Tukey pairwise comparisons, while ensuring the homogeneity of variances, to identify the source of this significant distinction, it was established that a marked difference existed exclusively between the job satisfaction scale scores of nurses working only during daytime and those who were exclusively on-call workers. Specifically, the job satisfaction scale scores for clinical nurses who worked solely during daytime hours were significantly higher in comparison to their counterparts who were exclusively on-call workers.

Significant findings have been unearthed in relation to the job satisfaction scale scores among clinical nurses based on their willingness in choosing the profession ($Z=-2.091$; $p=0.037$). It was conclusively determined that the job satisfaction scale scores of clinical nurses who actively and willingly chose the profession were markedly higher than those who did not choose the profession of their own volition.

Furthermore, an important statistical discrepancy emerged concerning the scores on the COVID-19 Fear Scale, hinging upon the degree of disturbance caused by the pandemic's inherent uncertainties ($Z=-4.254$; $p=0.000$). This analysis highlighted that individuals who reported a high level of disturbance due to the pandemic's uncertainties exhibited significantly elevated scores on the COVID-19 Fear Scale in contrast to those who reported a lower level of disturbance.

Equally noteworthy, a significant distinction was noted regarding the scores on the COVID-19 Fear Scale with regard to whether job satisfaction had been adversely affected by the

pandemic ($Z=-3.690$; $p=0.000$). It was discerned that individuals whose job satisfaction had been negatively impacted by the pandemic displayed significantly higher scores on the COVID-19 Fear Scale in comparison to those whose job satisfaction remained unscathed.

A statistically significant distinction was ascertained in the scores on the Intolerance of Uncertainty Scale, contingent upon whether job satisfaction had been adversely impacted by the pandemic ($t=2.958$; $p=0.003$). This analysis revealed that individuals whose job satisfaction had experienced a negative impact due to the pandemic exhibited notably higher scores on the Intolerance of Uncertainty Scale in comparison to those whose job satisfaction remained unaffected by the pandemic.

Table 5. Comparison of Scale Scores with Some Working Characteristics of Nurses

Variable (N=220)	n	COVID-19 fear scale		Intolerance of Uncertainty Scale		Job satisfaction scale for clinical nurses	
		$\bar{X} \pm Sd$	Median [IQR]	$\bar{X} \pm Sd$	Median [IQR]	$\bar{X} \pm Sd$	Median [IQR]
Type of working							
Daytime shift ⁽¹⁾	63	16.38±6.65	16.0 [8.0]	38.30±8.25	38.0 [11.0]	127.14±18.70	126.0 [24.0]
Night shift ⁽²⁾	45	15.33±5.61	14.0 [8.0]	38.22±8.91	37.0 [11.5]	117.09±16.37	119.0 [20.0]
Day and night shift ⁽³⁾	112	16.71±5.39	16.0 [7.0]	38.83±9.43	39.0 [14.5]	121.33±16.72	121.0 [23.8]
Statistical analysis * Possibility Difference		$\chi^2=2.240$ $p=0.326$		$F=0.108$ $p=0.898$		$F=4.708$ $p=0.010$ [1-2]	
Willingly choose the profession	169	16.33±5.83	15.0 [8.0]	38.40±9.15	38.0 [13.0]	123.37±17.82	124.0 [23.5]
Yes	51	16.35±5.82	16.0 [7.0]	39.06±8.38	40.0 [9.0]	118.02±16.03	117.0 [19.0]
No							
Statistical analysis Possibility		$Z=-0.130$ $p=0.897$		$t=-0.457$ $p=0.648$		$Z=-2.091$ $p=0.037$	
Have had COVID-19 before	139	15.97±5.92	15.0 [8.0]	38.59±9.02	38.0 [12.0]	122.16±17.41	122.0 [24.0]
Yes	81	16.94±5.63	17.0 [6.5]	38.49±8.92	38.0 [12.5]	122.08±17.84	124.0 [21.5]
No							
Statistical analysis Possibility		$Z=-1.296$ $p=0.195$		$t=0.077$ $p=0.939$		$Z=-0.230$ $p=0.818$	
Disturbing pandemic uncertainty	193	16.92±5.76	16.0 [7.5]	38.94±8.90	39.0 [12.0]	121.83±17.67	122.0 [24.0]
Yes	27	12.14±4.35	12.0 [6.0]	35.78±9.12	36.0 [11.0]	124.22±16.61	125.0 [23.0]
No							
Statistical analysis Possibility		$Z=-4.254$ $p=0.000$		$t=1.726$ $p=0.086$		$t=-0.662$ $p=0.509$	
The negative impact of job satisfaction in the pandemic	185	16.95±5.69	16.0 [6.5]	39.32±8.83	39.0 [11.5]	121.79±17.75	122.0 [24.0]
Yes	35	13.03±5.41	12.0 [8.0]	34.51±8.70	34.0 [11.0]	123.89±16.43	125.0 [22.0]
No							
Statistical analysis Possibility		$Z=-3.690$ $p=0.000$		$t=2.958$ $p=0.003$		$t=-0.646$ $p=0.519$	

*In the data with normal distribution, "Independent Sample-t" test (t-table value) is used to compare the measurement values of two independent groups; "ANOVA" test (F-table value) statistics were used to compare the measurement values of three or more independent groups. "Mann-Whitney U" test (Z-table value) when comparing the measurement values of two independent groups in data that does not have a normal distribution; "Kruskall-Wallis H" test (χ^2 -table value) statistics were used to compare three or more independent groups

It is noteworthy that, although not explicitly presented in the table, no statistically significant differences were observed with regard to scale scores based on factors such as the duration of employment, the specific unit of employment, the employing institution, and the duration of employment within the unit.

Additionally, it is important to highlight that, while not featured in the table, a positive albeit very weak and statistically significant correlation was identified between the Fear of COVID-19 Scale and the Intolerance of Uncertainty Scale ($r=0.172$; $p=0.011$). This correlation implies that as scores on the Intolerance of Uncertainty Scale increase, there is a corresponding increase in scores on the Fear of COVID-19 Scale, and conversely, as scores on the Intolerance of Uncertainty Scale decrease, there is a corresponding decrease in scores on the Fear of COVID-19 Scale.

3. DISCUSSION

In this investigatory undertaking, which was executed with the express objective of ascertaining the gradations of apprehension pertaining to COVID-19, occupational contentment, and the degree of intolerance toward ambiguity among clinician nurses in the throes of the pandemic, the constituent body of this examination comprises nurse practitioners laboring across diverse administrative divisions and jurisdictions. It is incontrovertible that the COVID-19 pandemic begets a litany of adversities besetting healthcare personnel, encompassing but not limited to psychological manifestations such as anxiety, despondency, trepidation, and a conspicuous lack of patience in the face of nebulous circumstances. It is with great perspicuity that we recognize nurses as a demographic disproportionately afflicted by the pandemic's deleterious effects, principally due to their unswerving proximity to the infirm (Chen et al., 2020; Hu et al., 2020; Kang et al., 2020; Saleem et al., 2020).

The nurses in the present study had an average COVID-19 Fear Scale score of 16.33 ± 5.82 , indicating they experienced a moderate level of fear. In line with our research, several studies (Çayır Yılmaz and Uysal, 2021; Dymecka et al., 2021; Abid et al., 2021; Labrague and Janet de los Santos, 2021; Gritsenko et al., 2021) in the literature have reported similar findings of moderate fear among nurses. Some studies, particularly during the early stages of the pandemic, also showed

that nurses experienced high levels of fear (Hu et al., 2020; Sasaki et al., 2020). While it was hypothesized that variables like age, gender, marital status, and education level might be related to COVID-19 fear among nurses, our study did not find any significant associations. This aligns with the observations in the study by Labraque and de los Santos (2021), where no significant relationships were found between gender, marital status, and education level, and fear of COVID-19. However, the majority of studies have reported associations between variables such as age, gender, education level, marital status, having children, and work style (part-time/full-time) and COVID-19 fear (Labraque and de los Santos, 2021; Moussa et al., 2021; Al Sulais et al., 2020; Huang et al., 2020; Fu et al., 2021).

Research in the literature consistently points to the notion that uncertainty is closely linked to feelings of fear and anxiety (Sarı and Dağ, 2009). These studies further highlight that individuals with a low tolerance for uncertainty tend to encounter greater challenges in adapting, experience heightened anxiety, and struggle when faced with difficulties and uncertain situations in their daily lives (Boelen et al., 2016; Carleton et al., 2012). In our study, the average score on the Nurses' Intolerance of Uncertainty Scale was 38.55 ± 8.97 , indicating a moderate level of intolerance to uncertainty. Notably, we found that nurses who expressed discomfort with uncertainty during the pandemic tended to score significantly higher on the COVID-19 Fear Scale. This observation was further supported by the fact that as nurses' scores on the COVID-19 scale increased, their intolerance of uncertainty scale scores also rose. Studies conducted by Duman (2020) and Bakioğlu et al. (2020) have both revealed a positive association between fear of COVID-19 and intolerance of uncertainty. While there are numerous studies in the literature measuring stress and anxiety levels among healthcare workers during the pandemic, Özdemir et al. (2021) identified a positive correlation between stress levels and intolerance of uncertainty scores in healthcare workers during the pandemic. Another study found that healthcare workers with high intolerance of uncertainty experienced significantly more anxiety during the COVID-19 pandemic (Smith et al., 2020). In this context, it can be inferred that uncertainty significantly impacted the fear, anxiety, and stress levels experienced by healthcare workers during the pandemic.

In this present study, the nurses' job satisfaction was found to have an average score of 122.12 with a standard deviation of 17.53. This suggests that nurses' job satisfaction is not low but rather above the average range. Consistently, a study by Zakiyah and her colleagues in 2021 also noticed that most nurses had moderate to high job satisfaction. Furthermore, a different study

conducted by Giménez-Espert and others in 2020 reported that nurses generally experienced high levels of job satisfaction. In our own investigation, we observed that nurses who believed the pandemic had a negative impact on their job satisfaction exhibited heightened concerns related to COVID-19. Labrague and Santos (2021) also discovered a significant decrease in job satisfaction among individuals with a fear of COVID-19 in their study. Likewise, in another study exploring the psychological resilience, intent to leave their profession, and job satisfaction among nurses and midwives, it was noted that those with strong psychological resilience also tended to have high job satisfaction. Interestingly, a quarter of nurses and midwives expressed an intention to leave their positions during the pandemic, and they reported low job satisfaction in a study by Piotrowski et al. in 2022. However, our study did not find a correlation between the fear of COVID-19 and job satisfaction. Instead, we uncovered a significant connection between nurses' age, educational level, working style, their career choice motivation, and their job satisfaction. Similarly, existing literature has documented a significant relationship between nurses' age and education (Zakiyah et al., 2021) and their working style (Labrague and Janet de los Santos, 2021) and their inclination to leave their jobs during the pandemic. Additionally, research has shown a notable link between nurses' working style and their overall stress levels and stress related to COVID-19 (Said and El-Shafel, 2021).

Our research revealed that nurses exhibited a moderate level of intolerance to uncertainty. Moreover, we found that nurses who believed their job satisfaction had been negatively impacted by the pandemic had significantly higher scores on the intolerance of uncertainty scale. Similarly, a related study reported that individuals who expressed regret about their choice of the nursing and midwifery profession and faced difficulties in their personal, family, and professional lives due to COVID-19 also had significantly higher intolerance of uncertainty scores (Erkal-Aksoy and Koçak, 2020). In the same study, it was noted that 62.4% of midwives and nurses struggled to cope with the uncertain circumstances during the pandemic, with 42.6% expressing a desire for psychological support and 11.8% expressing disillusionment with their profession. At the onset of the pandemic, healthcare workers, particularly in the context of unclear control measures and heightened uncertainty about the disease, exhibited higher levels of intolerance to uncertainty in studies conducted during that period. However, in Turkey, as in the rest of the world, intolerance to uncertainty decreased as more information about the disease's progression, the establishment of

preventive measures and treatment protocols, improved pandemic management, widespread vaccination campaigns, and a decrease in the number of cases became evident.

4. CONCLUSION AND RECOMMENDATIONS

The global impact of COVID-19 initially instilled great fear and uncertainty in people worldwide, particularly in nurses who stood at the forefront of the battle against this global pandemic among healthcare professionals. However, as the pandemic has become more manageable compared to its outset, it's evident that nurses no longer harbor significant fear of COVID-19. Instead, what seems to affect their fear of COVID-19 is their level of intolerance to uncertainty. In the current phase of the pandemic, the decrease in the number of COVID-19 patients, the reduction of overtime and excessive workloads, the return of working conditions to pre-pandemic standards, and improvements in healthcare workers' salaries have had a positive impact on the job satisfaction of nurses. Nonetheless, it's important to note that variables such as age, education level, working style, and the voluntary choice of the nursing profession still exert influence over job satisfaction. In light of this, it's crucial to implement a program that regularly shares the most recent information about the pandemic's progression with nurses. Providing training sessions designed for this purpose and offering support through healthcare policies can significantly contribute to reducing both the fear of COVID-19 and nurses' intolerance to uncertainty. Ultimately, this can help mitigate the negative effects on job satisfaction and the attrition of nurses from the profession. This study has two main limitations. Firstly, data collection was conducted online instead of through face-to-face interviews, which may have limited the depth of responses. Secondly, the response rates from healthcare professionals were lower during the pandemic, impacting the study's sample size.

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