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Nurses' Fear of COVID-19 and Job Motivation Levels: A Cross-Sectional Study

Hemşirelerin COVID-19 Korkusu ve İş Motivasyon Düzeyleri: Kesitsel Çalışma

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ABSTRACT

Objective: This study determined nurses' fear of COVID-19 and job motivation levels.**Materials and Methods:** The study was conducted cross-sectionally with 147 nurses working in a public hospital between April 1 and April 30, 2022. Data were collected using the Personal Information Form, COVID-19 Fear Scale, and Nurse Job Motivation Scale. Data were evaluated using number, percentage, mean, and nonparametric tests.**Results:** The mean age of the nurses was 29.95±6.12 years (min=22, max=51); 89.1% were female, 59.2% were married, and 68.7% were undergraduate graduates. The total score on the COVID-19 Fear Scale was 15.85±5.73 (min=7, max=35), and the total score on the Nurse Job Motivation Scale was 60.70±8.66 (min=37, max=75). There was a significant difference between the total scores of the Nurse Job Motivation Scale and educational status, willingly choosing the unit where the nurses work, being satisfied with the unit where they job, and finding the nursing profession suitable for themselves (p<0.05). In addition, female nurses' mean COVID-19 Fear Scale scores were higher than male nurses (p<0.05).**Conclusion:** The study's results showed that nurses' fear of COVID-19 was close to average, and their work motivation was above average.**Keywords:** Fear of COVID-19, motivation for job, nurse

ÖZ

Amac: Bu çalışma hemşirelerin COVID-19 korkusunu ve iş motivasyon düzeylerini belirlemek amacıyla yapıldı.**Materyal ve Metot:** Çalışma bir kamu hastanesinde 1 Nisan-30 Nisan 2022 tarihleri arasında görev yapan 147 hemşire ile kesitsel olarak yapıldı. Kişisel Bilgi Formu, COVID-19 Korkusu Ölçeği ve Hemşire İş Motivasyonu Ölçeği kullanılarak veriler toplandı. Veriler sayı, yüzde, ortalama ve nonparametrik testler kullanılarak değerlendirildi.**Bulgular:** Hemşirelerin yaş ortalaması 29.95±6.12 (min=22, max=51) olup, %89.1'i kadın, %59.2'i evli ve %68.7'si lisans mezunudur. Hemşirelerin COVID-19 Korkusu Ölçeği toplam puanı 15.85±5.73 (min=7, max=35) ve Hemşire İş Motivasyonu Ölçeği toplam puanı 60.70±8.66 (min=37, max=75) bulundu. Hemşire İş Motivasyonu Ölçeği toplam puanları ile eğitim durumu, hemşirelerin çalıştığı birimi isteyerek seçme, çalıştığı birimden memnun olma ve hemşirelik mesleğini kendisi için uygun bulma değişkenleri arasında anlamlı bir fark vardır (p<0.05). Ayrıca kadın hemşirelerin COVID-19 Korkusu Ölçeği puan ortalamaları erkeklerden anlamlı bir biçimde yüksektir (p<0.05).**Sonuç:** Çalışmanın sonuçları hemşirelerin COVID-19 korkusunun orta düzeye yakın ve iş motivasyonlarının ortalamasının üzerinde olduğunu gösterdi.**Anahtar Kelimeler:** COVID-19 Korkusu, hemşire, iş motivasyonu

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INTRODUCTION

Motivation, the force that influences or directs behavior, effectively initiates behaviors to achieve intended goals.^{1,2} Motivation can be an internal drive that creates behaviors and inspiration to fulfil responsibilities without external influence. Motivation can also consist of rewards, bonuses, payments, and benefits by guiding individuals to fulfil their responsibilities using coercion or instruction to receive rewards in return.²

Work motivation is one of the main factors determining an organisation's success.^{2,3} The main thing in ensuring work motivation is that employees do their jobs willingly, and as a result, their productivity increases.³ Work motivation in the healthcare organisation is considered an important measure of the response of the healthcare professional to increasing challenges and demands.² Motivation, which has a critical place in every profession, is important for nurses, who constitute a large part of healthcare organizations.⁴

Many factors affect the motivation of nurses.^{1,4} Factors such as loving their profession, being valued and respected, being appreciated, participating in decisions, fair discipline, job security, and social security affect the motivation of nurses.¹ The level of motivation has a positive or negative effect on the health service.^{4,5} The service provided by nurses with increased motivation can reflect positively on patients and the health institution.⁴ Motivation levels can change very quickly because nurses work in a stressful environment.⁵ Changes in the direction of decreasing motivation negatively affect the performance of nurses and may lead to a decrease in the quality of patient care and an increase in mistakes.^{5,6} The COVID-19 pandemic is an extraordinary situation that causes fear in many people. Evaluating this fear is important in taking measures against psychological problems that may arise.⁷ Determining and evaluating the fear levels of nurses in high-risk groups during the COVID-19 pandemic is necessary for managing COVID-19 fear and the continuity of psychological well-being.⁸ When the literature is examined, it is stated that nurses have a high level of fear of COVID-19.⁹⁻¹¹ Studies have been conducted in the world and in Türkiye to determine nurses' fear of COVID-19,⁸⁻¹² and their motivation^{4-6,8,12} but no study was found to examine the level of fear of COVID-19 and work motivation in the same group of nurses.

This study was conducted to determine the fear of COVID-19 and the job motivation levels of nurses.

MATERIALS AND METHODS

Ethical Considerations: This study was conducted in accordance with the Declaration of Helsinki. This study was approved by the Ethics Committee of a

university (Decision date:24.02.2022, decision no:45-03). In addition, institutional permission was obtained from the Provincial Directorate of Health, and written informed consent from the nurses participating in the study.

Type of Study: This study was cross-sectional.

Place and Time of the Study: This study was conducted in a public hospital in the Eastern Black Sea Region of Türkiye between April 1 and April 30, 2022.

Population and Sample of the Study: No sample selection was made in the study, and it was aimed to reach the entire population with the complete census method. Out of a total of 185 nurses working in the hospital, 147 nurses who had been working as a nurse for more than one year, were not on leave or reported on the study dates, and agreed to participate were included.

Data Collection Tools: Personal Information Form, COVID-19 Fear Scale, and Nurse Job Motivation Scale were used as data collection tools.

Personal Information Form: A 12-question form including questions such as age, gender, educational status, physical and psychiatric illness, having COVID-19, and nursing profession was created by the researchers.

COVID-19 Fear Scale: The scale was developed by Ahorsu et al.,¹³ and a Turkish validity and reliability study was conducted by Ladikli et al.¹⁴ The 7-item scale with a single sub-dimension is a 5-point Likert type. The increase in the participants' mean score on the scale indicates an increased fear of COVID-19. The Cronbach's alpha coefficient of the scale adapted to Turkish is 0.86.¹⁴ In our study, the Cronbach's alpha coefficient was 0.85.

Nurse Job Motivation Scale: The validity and reliability scale performed by Engin and Çam¹⁵ is a 25-item scale in a 3-point Likert type. According to the answers given by the nurses to the items of the scale, 1 point is given to "strongly disagree," 2 points to "partially agree," and 3 points to "agree." The maximum score that can be obtained from the scale is 75, and the minimum score is 25. Higher scores indicate higher levels of job motivation. Cronbach's alpha coefficient of the scale is 0.84.¹⁵ In our study, Cronbach's alpha coefficient of the scale was 0.89.

Data Collection: The study's data were collected through face-to-face interviews conducted by the researchers by going to the fields where the nurses worked. The nurses took approximately 15 minutes to complete the data collection tool.

Statistical Analysis: Data were analysed using the IBM SPSS 25 package program. The statistical significance level was accepted as $p < 0.05$. Whether the data were normally distributed was evaluated by the Kolmogorov-Smirnov normality test. Descriptive statistics were shown as a number, percentage, mean,

standard deviation, minimum, and maximum values. Since the data were not normally distributed, the Mann-Whitney U test was used to compare scale scores and two variables, and the Kruskal-Wallis H test was used to compare three or more variables.

RESULTS

The mean age of the nurses in the study was 29.95 ± 6.12 years (min=22, max=51). 89.1% of the nurses were female, 59.2% were married, 68.7% had a bachelor's degree, 66.0% had middle income and

expense status. 8.2% of the nurses had a physical illness, 5.4% had a psychiatric illness, and COVID-19 positive rate of nurses was 60.5%. The proportion of nurses who willingly chose the unit where they work is 63.3%, those who are satisfied with the unit where they work is 80.3%, those who find the nursing profession suitable for them is 63.3%, and those who are satisfied with the prestige of the nursing profession in the society is 8.2% (Table 1).

Table 1. Descriptive characteristics of nurses.

Variable	n (%)
Age	$\bar{X}=29.95 \pm 6.12$ (min=22, max=51)
Gender	Female 131 (89.1)
	Male 16 (10.9)
Marital status	Married 87 (59.2)
	Single 60 (40.8)
Educational status	High school graduate 18 (12.2)
	Associate degree 14 (9.5)
	Bachelor's degree 101 (68.7)
	Higher graduate 14 (9.5)
Income status	Bad 36 (24.5)
	Middle 97 (66.0)
	Good 14 (9.5)
Physical illness	There is 12 (8.2)
	None 135 (91.8)
Psychiatric illness	There is 8 (5.4)
	None 139 (94.6)
Being COVID-19 positive	Yes 89 (60.5)
	No 58 (39.5)
Willingly chose the unit where they work	Yes 93 (63.3)
	No 54 (36.7)
Satisfied with the unit where they work	Yes 118 (80.3)
	No 29 (19.7)
Finding the nursing profession suitable for you	Yes 93 (63.3)
	No 54 (36.7)
Satisfaction with the prestige of the nursing profession in society	Yes 12 (8.2)
	No 135 (91.8)
Total	147 (100)

The mean score of the COVID-19 Fear Scale was 15.85 ± 5.73 (min=7, max=35), and the mean score of

the Nurse Job Motivation Scale was 60.70 ± 8.66 (min=37, max=75) (Table 2).

Table 2. Nurses' scores on the COVID-19 Fear Scale and the Nurse Job Motivation Scale.

Variable	Min-Max	Mean \pm SD
COVID-19 Fear Scale	7-35	15.85 ± 5.73
Nurse Job Motivation Scale	37-75	60.70 ± 8.66

In this study, no statistical difference was found between the distribution of nurses' education, income status, current disease, and occupational characteristics and the total score of the Fear of COVID-19 Scale ($p>0.05$). In the study, a significant difference was found between gender and COVID-19 Fear Scale total scores ($p<0.05$), and the mean COVID-19 Fear Scale scores of female nurses were significantly higher than those of males ($p<0.05$). There is a significant difference between the total scores of the Nurse

Job Motivation Scale and the variables of educational status, willingly choosing the unit where the nurses work, being satisfied with the unit where they work, and finding the nursing profession suitable for themselves ($p<0.05$). There is no significant difference between the total scores of the Nurse Job Motivation Scale and those who are satisfied with the prestige of the nursing profession in society ($p>0.05$) (Table 3).

Table 3. Comparison of nurses' characteristics with COVID-19 Fear and Nurse Job Motivation Scale Scores.

Variable		COVID-19 Fear	Nurse Job Motivation
Gender	Female	15.00	63.00
	Male	12.00	61.50
	U	670.00	975.00
	p	0.018	0.649
Marital status	Married	16.00	63.00
	Single	14.00	63.00
	U	2180.50	2551.00
	p	0.090	0.816
Educational status	High school graduate	13.50	59.00
	Associate degree	15.00	57.00
	Bachelor's degree	14.00	64.00
	Higher graduate	20.00	57.50
	KW	6.630	8.578
Income status	p	0.085	0.035
	Bad	14.50	63.50
	Middle	14.00	62.00
	Good	17.00	63.17
	KW	0.400	1.843
Physical illness	p	0.819	0.398
	There is	11.50	58.50
	None	15.00	63.00
	U	710.00	646.50
Psychiatric illness	p	0.478	0.247
	There is	11.50	59.00
	None	15.00	63.00
	U	337.50	437.50
Being COVID-19 positive	p	0.61	0.311
	Yes	16.00	63.00
	No	14.00	62.00
	U	2118.50	2453.00
Willingly chose the unit where they work	p	0.114	0.611
	Yes	15.00	65.00
	No	15.50	56.00
	U	2453.00	1473.50
Satisfied with the unit where they work	p	0.611	0.001
	Yes	15.00	65.00
	No	14.00	50.00
	U	1697.00	412.00
Finding the nursing profession suitable for you	p	0.946	0.001
	Yes	15.00	65.00
	No	15.00	55.00
	U	2385.50	1100.00
Satisfaction with the prestige of the nursing profession in society	p	0.613	0.001
	Yes	16.00	66.00
	No	15.00	63.00
	U	714.00	583.50
	p	0.496	0.108

U: Mann-Whitney U test; KW: Kruskal-Wallis H test; $p<0.05$.

DISCUSSION AND CONCLUSION

The total score that can be obtained from the Fear of COVID-19 Scale is in the range of 7-35, and according to the mean total score of the Fear of COVID-19 Scale (15.85 ± 5.73) of the nurses in this study, their fear of COVID-19 is close to moderate. The COVID-19 pandemic is the leading cause of stress and fear for nurses who are important in health services (10). In a study, nurses' total COVID-19 Fear Scale score was reported to be 20.01.¹¹ The COVID-19 Fear Scale score of intensive care nurses (22.7) was moderate.¹⁰ In a study conducted on nurses working in 5 hospitals in the Philippines, it was reported that the mean COVID-19 Fear Scale scores of nurses who did not participate in COVID-19-related training were higher than those who participated in such training.¹⁶ Compared to the periods when the pandemic was widespread, it can be said that nurses' fear of COVID-19 was not high in this study due to situations such as increased vaccination rates, decreased case and mortality rates, and the information about COVID-19.

Emotional distress experienced by nurses due to stress decreases their motivation.¹⁵ In a study conducted on intensive care nurses in 2017, the mean total score of the Motivation scale was 69.22 ± 7.95 (min=29, max=87).¹² In a 2015 study conducted on nurses working in the internal medicine service, it was reported that the motivation of nurses was at a moderate level.¹⁷ In the literature, studies conducted before the pandemic reported that nurses' work motivation was moderate and above average.^{12,17} In this study, the work motivation level of nurses was 60.70 ± 8.66 (min=37, max=75), which is above the average. According to this result, we can say that the pandemic did not decrease the work motivation level of nurses in our study.

In this study, female nurses' mean COVID-19 Fear Scale scores were significantly higher than male nurses. The results of our study are similar to the literature.^{11,18,19} In a study, it was reported that there was no significant difference between nurses' age, education, marital status, having children, the clinic they worked in, total working hours and working hours in the present clinic, and COVID-19 Fear Scale scores. In the same study, a significant difference was found between gender and COVID-19 Fear Scale scores, and it was reported that the level of fear of COVID-19 was higher in female nurses than in male nurses.¹¹ In another study, it was reported that female healthcare workers' mean COVID-19 fear scores were significantly higher than male nurses.¹⁸ In a systematic review, it was revealed that being a nurse and being a woman poses a greater risk for fear of COVID-19.¹⁹ In terms of evaluating fears, it is important to know whether different groups need education and prevention programs according to some socio-demographic

characteristics such as age, gender, and education.⁷

This study showed no significant difference between the total Nurse Job Motivation Scale score and nurses' gender, marital status, income status, current illness, and COVID-19 positive status. No study was found in the literature to determine the level of nurse work motivation during the COVID-19 pandemic. A study conducted in 2018 with nurses working in 12 hospitals in Istanbul reported no statistical difference between nurses' gender, education, marital status, and mean scores of work motivation.¹⁷ In a 2017 study, it was reported that there was no significant relationship between intensive care nurses' age, education, working time, having a certificate and finding the facilities of the institution they work in sufficient and their motivation scores and that the motivation scores of female nurses were higher than male nurses.¹² In this study, which was conducted towards the end of the pandemic, the mean scores of nurses' work motivation did not differ according to gender.

In this study, the Nurse Job Motivation Scale scores were higher in nurses with higher educational status, who willingly chose the unit where they worked, who were satisfied with the unit where they worked, and who found the nursing profession suitable for themselves. According to a study, the motivation scores of nurses who see their profession as valuable and are satisfied with being in the institution where they work are higher.¹² In another study, it was reported that nurses' quality of work life positively affected their work motivation, and it was stated that nurses' work motivation levels could be positively affected by increasing their perception levels of quality of work life.³ A study in Ethiopia reported that 60.8% of nurses were satisfied with their jobs.²¹ In a study conducted to determine how nurses perceive work motivation, it was reported that most nurses (64.1%) perceived cause as motivating. The same study also reported that nurses defined motivation as prospective, recognition, and financial incentives.²² Our study was found to be consistent with the literature.

In conclusion, according to the study results, the COVID-19 fear of nurses working in the hospital is close to average, and their work motivation is above average. The Nurse Job Motivation Scale scores are higher in nurses with higher educational status, who willingly choose the unit they work in, who are satisfied with the unit they work in, and who find the nursing profession suitable for themselves. In addition, female nurses had higher COVID-19 fears than male nurses. It is predicted that nurses' fears will decrease as their knowledge about COVID-19 increases, and their work motivation will decrease with the improvement of the conditions in which they work. A similar study examining the fear of COVID-19 and work motivation level in the same group of nurses was not found in the literature. The following are recommen-

ded: 1- Further studies examining nurses' fear of COVID-19 and work motivation, 2- Determination of nurses' COVID-19 fear levels, 3- Implementation of prevention programs based on counselling and psychological support, 4- Strengthening the human resource management system and practices to improve the overall motivation of nurses. It was found in the study that the fear of COVID-19 among the nurses was close to moderate, and their work motivation was above average. Since our data reflect the nurses participating in the study in a hospital, it cannot be generalised to the entire nurse population.

Ethics Committee Approval: This study was planned following the Helsinki Principles, and ethical approval was obtained from the XXX University Ethics Committee (Date 24.02.2022, decision no: 45-03).

Conflict of Interest: No conflict of interest was declared by the authors.

Author Contributions: Concept – VS; Supervision – VS, AS; Materials – VS, AS; Data Collection and/or Processing – VS; Analysis and/or Interpretation – VS, AS; Writing –VS, AS.

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