Original Article

The Relationship between Nurses' Fear and Anxiety During the Covid-19 Pandemic Process and their Professional Commitment

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Abstract

Aims: The aim of this study is to determine the relationship between nurses' fear and anxiety during the pandemic process and their professional commitment.
Methods: The research population consisted of nurses working in hospitals affiliated to the Ministry of Health in Istanbul Province. The sample of the descriptive and correlational research included 315 nurses willing to participate in the study. The study was approved by the ethics committee and the written informed consent of the nurses participating in the study was obtained. Descriptive statistics (frequency, percentage, mean, standard deviation) were used in the analysis of the data, and Kruskal-Wallis H test, Mann-Whitney U test and Spearman Correlation test were used for comparisons.
Results: It was found that there was a positive correlation between age, professional experience, work experience in the unit and fear of coronavirus and anxiety level; a negative correlation between age, professional experience, work experience in the unit and the level of professional commitment. It was determined that there was a moderate positive correlation between fear of coronavirus and anxiety level, and a weak negative correlation between professional commitment and anxiety level.
Conclusion: Assessing and effectively managing nurses' fear of coronavirus and anxiety levels can be beneficial in increasing nurses' professional commitment and reducing resignations.

Key Words: Anxiety, fear of covid-19, nursing, professional commitment

Introduction

Covid-19 is a virus that spreads all over the world in a short time after it emerged in Wuhan, China in December 2019 and causes severe pneumonia (Huang at al., 2020). The first case in Turkey of this virus, which spreads rapidly throughout the world, was announced by the Ministry of Health on March 10, 2020 (Arpacioglu et al., 2021; Isik et al., 2021). It was declared as a pandemic by the World Health Organization, as a total of 118 thousand people were infected with the virus in 114 countries from 01 December 2019 to March 11, 2020, and 4 thousand 291 people died due to the virus (WHO, 2020; Cam and Dokumaci, 2022). According to the WHO weekly status report for Covid-19 dated 16.11.2022, as of 13 November 2022, more than 632 million confirmed cases and more than 6.5 million deaths have been reported worldwide (WHO,2022).

Due to their direct contact with patients, healthcare workers, especially nurses, play a critical role in the prevention of the COVID-19 epidemic with proper care and preventive procedures. Nurses who have been in close contact with an infected patient for the longest time among health professionals are reported to experience intense fear and anxiety due to the risk of transmission (Deying at al., 2020; Pappa at al., 2020).

Anxiety is a negative emotional state towards an unknown danger (Barlow, 2002). Fear is a defense mechanism that enables the human mind to focus on the fear object when faced with unexpected and unpredictable situations that show the psychological effects of the pandemic (Bakioglu et al., 2020; Ornell et al., 2020; Pakpour and Griffiths, 2020). It is a human reflex to feel fear, anxiety and worry due to positive or negative, sudden and unexpected changes in regular life and habits. Fear in pandemics are

situations that increase anxiety and stress levels in healthy individuals and increase the severity of existing symptoms in individuals with psychiatric disorders (Bakioglu et al., 2020; Ornell et al., 2020; Pakpour and Griffiths, 2020). Fear in nurses, on the other hand, is associated with increased psychological distress, lower job satisfaction, decreased perception of health, and increased intention to leave (De los Santos & Labrague, 2020).

Shanafelt et al. (2020) reported the sources of healthcare workers' anxiety during the pandemic process. They reported these resources as; access to appropriate personal protective equipment, exposure to COVID-19 at work and infecting family members, fear of spreading the infection in the workplace, uncertainty over how their organization will support their individual and family needs if they become infected, and increased working hours (Shanafelt at al., 2020.

Professional commitment; It is the degree to which an individual evaluates his profession in a central place in his life as a result of his studies in order to gain skills and expertise in a certain field. In other words, commitment to the profession is the individual's belief in and acceptance of the values and goals brought by the profession, making efforts to continue these in his professional life, evaluating the viable alternatives related to his profession, being willing to improve himself in the professional field and being determined to perform his profession (Bengiray and Sonmez, 2011; Derin at al.,2017).

Professional commitment is three-dimensional. An individual with a strong emotional professional commitment continues to work willingly in his profession. Individuals with a strong continuance professional commitment feel the need to stay in their profession. Individuals with a strong normative professional commitment feel an obligation to remain in their profession (Blau 2001).

Professional commitment in Nursing is determined by believing, accepting and striving to realize the professional values, as well as being willing to improve in the field and being determined to maintain the profession (Benligiray & Sonmez, 2011). Although it is known that nurses are strongly committed to both the organization and the profession, it is reported that difficult working conditions are associated with decreased commitment. There are studies reporting that the intense anxiety experienced by nurses during the pandemic process may cause problems such as regretting becoming a nurse or leaving work (Afaraghaee at al., 2014; Fernandez at al., 2020).

It is necessary to know and reflect the physical and psychological impact of working on nurses during a pandemic or epidemic. It should be kept in mind that by determining nurses' need for support, resignations can be prevented and their professional commitment can be increased. At the same time, this will increase patient satisfaction, which is one of the nursing care indicators.

Methods

It is a descriptive and correlational research conducted to determine the relationship between nurses' fear and anxiety during the pandemic process and their professional commitment. The research population consisted of nurses working in hospitals affiliated to the Ministry of Health in Istanbul Province. The sample included 315 nurses willing to participate in the study. Data were obtained electronically between August 2020 - October 2020 from nurses working in hospitals affiliated to the Ministry of Health in XXX and willing to participate in the study. Data were collected using the Personal Information Form, Fear of COVID-19 Scale, Beck Anxiety Inventory, and Nurses' Professional Commitment Scale.

Inclusion criteria; Being a nurse working in hospitals affiliated to the Ministry of Health in Istanbul, agreeing to participate in the research,

Exclusion criteria; refusing to participate in the study was determined as leaving the participation in the study unfinished.

Permission to participate in the study was obtained from the nurses with an informed consent form. Nurses were not given any incentive to participate. The data were prepared via a software on the internet and carried out as an online survey study.

The ***"Individual Identification Form"*** used in the study was determined by the researchers in line with the literature. Regarding the introductory characteristics of nurses (gender, age, graduated school, marital status, child status, if there is a child, who is interested in the pandemic process, any chronic disease status, working time in the profession and in the current unit, education about the Covid-19 pandemic, if he was educated, from whom he received the education, caring for a Covid -19 patient, finding personal protective equipment, choosing the nursing profession voluntarily, the situation and reason for wanting to leave the profession, thinking that he chose the wrong profession, The physical or mental health problem you experienced during the Covid-19 pandemic, Getting a diagnosis of Covid -19, being a relative or

acquaintance who was diagnosed with Covid -19 and recovered, or being a relative or acquaintance who died due to Covid-19) consists of 23 questions. The questions in the Individual Identification Form were asked because there may be factors that may affect nurses' fears and anxieties and their professional commitment during the COVID 19 pandemic process.

Fear of COVID-19 Scale; The scale developed by Ahorsu et al. (2020) was adapted into Turkish by Bakioglu et al. (2020) (Ahorsu et al., 2020; Bakioglu et al., 2020). The scale is one-dimensional and consists of seven items. The total score obtained from all items of the scale reflects the level of fear of Coronavirus (Covid-19) experienced by the individual. Scoring of the scale items ranges from 1=strongly disagree to 5=strongly agree). The lowest score that can be obtained from the scale is 7, and the highest score is 35. A high score from the scale means that the fear of coronavirus is also high. The Cronbach Alpha internal consistency coefficient for the Turkish version of the scale is 0.84 (Bakioglu et al., 2020).

Beck Anxiety Inventory (BAI): Beck et al. The Turkish validity and reliability study of a 21-item self-assessment scale used to measure the level and severity of anxiety symptoms, developed by Ulusoy (1993). Each item gets a score between 0-3 and is scored between 0-63 in total. High scores from the scale indicate a high level of anxiety. 0-7 shows minimal anxiety, 8-15 mild anxiety, 16-25 moderate anxiety and 26-63 severe anxiety levels taken from the scale (Ulusoy, 1993). It is seen that it is frequently used in the fields of health and nursing.

***Nurses' Professional Commitment Scale*;** It is a 26-item, three-dimensional, four-point Likert-type scale developed by Lu et al. (2000). The Turkish validity and reliability study of the scale was conducted by Cetinkaya et al. (2015). Nurses' Professional Commitment Scale includes the sub-dimensions of maintaining as professional membership (8 items), belief in goals and values (5 items) an(d willingness to make an effort (13 items), and potential responses range from strongly disagree (1) to strongly agree (4). In the scale, items 14,15,16,17,18,19,20,21,25 are reversed. Higher scores obtained from the scale indicate higher professional commitment (Cetinkaya et al. (2015).

The obtained data were transferred to the computer environment and analysed with appropriate statistical methods in the SPSS 24 program. The data were tested with Kolmogorov-Smirnov test, and Kruskal-Wallis H test and Mann-Whitney U test were used for comparative statistics not normally distributed. Results were evaluated at $p<0.05$ significance level.

Results

It was determined that the mean age of the nurses was 33.29±9.81 years, they had been working in the profession for 12.32±11.19 years and they had been working in their current units for 19.27±36.33 months.

Table 1. Distribution of Nurses' Introductory Characteristics

Characteristics		**n**	**%**
Gender	Female	295	93.7
	Male	20	6.3
Marital Status	Married	145	46.0
	Singler	170	54.0
Graduation	Health Vocational High School	50	15.9
	Associate Degree Nursing Program	21	6.7
	Undergraduate Nursing Program	190	60.3
	Master's /PhD	54	17.1
Children	Yes	132	41.9
	No	183	58.1
Who Cared for the	Child was	38	41.9

Child During the Pandemic Period? *	alone		
	Me and my Spouse	6	17.1
	Grandmother – Aunt	24	17.8
	Sibling	22	17.0
	Me	18	14.0
	My Spouse	22	17.0
Chronic Disease	Yes	69	21.9
	No	246	78.1
Unit	Internal Medicine Units	55	17.5
	Surgical Medicine Units	20	6.3
	Obstetrics and Gynaecology	17	5.4
	Emergency	15	4.8
	Covid Units (Service, Intensive Care, Polyclinic, Filiation)	56	17.8
	Operating Room	9	2.9
	Polyclinic	20	6.3
	Intensive Care	20	6.3
	Infection Control, Training and Quality Unit	14	4.4
	Other	24	7.6
Received Covid-19 Training	Yes	195	61.9
	No	120	38.1
Cared for a Covid-19 Patient	Yes	205	65.1
	No	110	34.9
Have You Experienced a Shortage of Personal Protective Equipment?	Yes	82	25.9
	No	233	74.1
Which Personal Protective Equipment was Inadequate?	N95 Mask	13	16.0
	All Masks	7	8.6
	Gown	2	2.5
	Mask and Face Shield	2	2.5
	All	24	29.6
	Green Apron	13	16.0
	Mask and Apron and/or Gown	17	21.0
	Other	3	3.7

* Two participants did not answer the question.

Table 2. Descriptive Statistics Results for Scales

	N	M.±SD.	Min-Max
Fear of COVID-19 Scale	315	20.26±7.28	7-35
Beck Anxiety Inventory	315	18.85±16.00	0-63
Nurses' Professional Commitment Scale	315	67.08±8.92	28-101

Table 2 shows nurses' average and minimum-maximum scores obtained from the scales. In Table 3, it is seen that the scores obtained from Fear of Covid-19 Scale differ according to the school nurses graduated from, and it was determined in the post-hoc analysis that the difference resulted from the different scores between Health Vocational High School Graduates and Nurses with a Bachelor's Degree. It was established that those who were married and had children had higher Fear of Covid-19 Scale, BECK Anxiety Inventory and Professional Commitment Scale scores. It was concluded that those who had problems with personal protective equipment experienced more fear and anxiety. It was found that the scores obtained from Fear of Covid-19 Scale differed according to the units. It was established that the difference resulted from the fact that nurses working in intensive care obtained lower scores than those working in internal medicine units, surgical medicine units and polyclinics, while those working in internal medicine units obtained higher scores than those working in surgical medicine units, intensive care units, and covid units.

Table 3. Comparison of Fear of Covid-19 Scale, BECK Anxiety Inventory and Nurses' Professional Commitment Scale according to the Descriptive Characteristics of Nurses

Groups			Fear of Covid-19 Scale	BECK Anxiety Inventory	Nurses' Professional Commitment Scale
		n	Median	Median	Median
Gender	Female	295	21.00	15.00	67.00
	Male	20	19.00	11.00	72.00
	U		2331	2748	2020
	p		.116	.608	**.018**
Marital Status	Married	145	23.00	21.00	6500
	Single	170	17.00	10,00	69.00
	U		6593	9840	9775
	p		**0.001**	**0.002**	**0.002**
Graduation	Health Vocational High School	50	16.50 [a]	8.00	70.00
	Associate Degree Nursing Program	21	22.00 [b]	12.00	70,00
	Undergraduate Nursing Program	190	21.00[a,b]	17.00	67.00
	Master's /PhD	54	21.00[a,b]	10.50	69.50
	H		9.894	5.042	3.015
	p		**.019**	.169	389
Children	Yes	132	23.50	22.00	64.50
	No	183	18.00	10.00	70.00
	U		6291	8525	8415
	p		**0.001**	**0.001**	**0.001**
Person Who Cared for	Child was alone	38	23.50	21.00	63.50
	Me and My Spouse	6	29.50	270.0	60.00

the Child During the Pandemic Period	Grandmother-Aunt	23	22.00	15.00	66.00
	Sibling	22	24.50	25.50	63.00
	Me	18	24,50	25.50	65.00
	My Spouse	22	23.00	27.00	65.50
	H		4.948	2.148	2.800
	p		.422	.828	.731
Chronic Disease	Yes	69	24.00	21.00	64.00
	No	246	190.0	12.50	68.50
	U		5463.500	6662.500	6897.500
	P		**.001**	**.006**	**.017**
Received Covid-19 Training	Yes	195	200.0	12.00	67.00
	No	120	21.00	17.50	67.50
	U		10197	10561.5	11394.5
	P		.055	.147	.697
Unit	Internal Medicine Units	55	22.00	21.00	64.0
	Surgical medicine Units	20	18.50	10.00	61.50
	Obstetrics and Gynaecology	17	20.00	16.00	69.00
	Emergency	15	23.00	25.00	72.00
	Covid Units (Service, Intensive Care, Polyclinic, Filiation)	56	19.00	16.50	68.00
	Operating Room	9	22.00	27.00	69.00
	Polyclinic	20	24.00	15.50	65.00
	Intensive Care	20	18.00	16.50	69.50
	Infection Control, Training and Quality Unit	14	22.50	11.50	65.50
	Other	24	25.50	20.00	65.50
	H		21.097	3.696	7.022
	P		**.012**	.930	.635
Cared for a Covid-19 Patient	Yes	205	20.00	17.00	67.00
	No	110	21.00	10.50	67.00
	U		10316.000	9932.500	11202.500
	P		.213	.081	.925
Have You Experienced a Shortage of Personal Protective Equipment?	Yes	81	23.00	26.00	66.00
	No	232	20.00	12.00	68.00
	U		7969.000	6442,000	8567.000
	P		**.042**	**.000**	.237

[a,b] post hoc pairwise Mann-Whitney analyses; groups with the same superscript letter do not differ from each other
U: Mann Whitney U test H:Kruskall Wallis H Test

Nurses who were married (p=0.001) and had children (p=0.001), chronic diseases (p=0.001), and nurses who had a shortage of protective equipment (p=0.002) were found to have more fear of Covid 19. According to the graduated school, there is a statistically significant difference between the scores obtained from the Fear of Covid 19 Scale; In the posthoc analysis, it was determined that this difference was due to the difference in scores between the graduates of Health Vocational High School and the nurses who had a bachelor's degree. According to the units studied; It was determined that there was a statistical difference due to the fact that nurses working in intensive care units received lower scores than those working in internal units, surgical units and polyclinics, and those working in internal units received higher points than those working in surgical units, intensive care units and covid units.

Nurses who were married (p=0.002), had children (p=0.001), had chronic diseases (p=0.006) and had a shortage of protective equipment (p=0.000) were found to experience more anxiety. The scores obtained from the Nurses' Professional Commitment Scale; gender (p=0.018), marital status (p=0.002), having children (p=0.001) and chronic disease status (p=0.017).

Table 4. The Relationship Between Age, Professional Experience, Work Experience in the Unit and Fear of Covid, Anxiety and Professional Commitment Levels

		Fear of Covid-19 Scale	BECK Anxiety Inventory	Nurses' Professional Commitment Scale
Your age	r	.384**	.163**	-.264**
	p	**.001**	**.004**	**.001**
How Many Years of Experience Do	r	.321**	.168**	-.263**
You Have in Your Profession?	p	**.001**	**.003**	**.001**
How Long Have You Been Working in	r	.172**	.065	-.117*
Your Current Unit?	p	**.002**	.249	**.037**

r*: Spearman's Rho

It was determined that there was a moderate positive correlation between age and professional experience and fear of coronavirus, and a weak but statistically significant positive correlation between age and professional experience and anxiety level. It was found that fear of coronavirus and anxiety increased along with the age and professional experience. There was a weak but statistically significant negative correlation between age, professional experience and the level of professional commitment. In other words, professional commitment decreased as the age and professional experience increased.

A weak but statistically significant positive correlation was found between work experience in the unit and fear of coronavirus. It was established that the fear of coronavirus increased along with the work experience in the unit. There was a weak but statistically significant negative correlation between work experience in the unit and the level of professional commitment. In other words, professional commitment decreased as the work experience in the unit increased.

Table 5. The Relationship between Fear of Coronavirus (Covid-19), Anxiety and Professional Commitment Levels

		Nurses' Professional Commitment Scale
Fear of Covid-19 Scale	r*	-.082
	P	.145
BECK Anxiety Inventory	r*	-.150
	P	.008

r*: Spearman's Rho

It was determined that there was a moderate and statistically significant positive correlation between fear of coronavirus and anxiety level. It was found that the fear of coronavirus increased along with the anxiety level (r:.621; p=0.001). A very weak negative correlation was found between fear of coronavirus and level of professional commitment, and this relationship was not statistically significant. There was a weak negative correlation between professional commitment and anxiety level, and this relationship was found to be statistically significant. It was found that the professional commitment scores decreased as the level of anxiety increased.

Discussion

The pandemic that emerged due to the Covid-19 virus has led nurses to face the fact that they may have to cope with occupational risks that may threaten not only their own lives but also the lives of their loved ones. This situation caused nurses to experience intense fear and anxiety. In this study, it was aimed to reveal how this fear and anxiety affects professional commitment.

Fear of Covid-19 Scale mean score of the nurses was found to be 20.26±7.28. The mean score of BECK Anxiety Inventory was found as 18.85±16.00 (min:0

- Max:63) and the mean score of Nurses' Professional Commitment Scale was 67.08±8.92 (min:28-Max:101).

In our study, it was observed that the fears, anxiety and professional commitment of nurses for Covid-19 were high. This result is normal during the Covid-19 pandemic process.

Similary in the study of Salman et al. (2020), it was stated that 72% of the university staff and students feared Covid-19 due to the absence of a definitive treatment and the high rate of transmission. In the study of Garcia Reyna et al. (2020) on hospital staff's perceptions of Covid-19 fear according to variables of gender, age, unit and shift, it was stated that nurses experienced more fear than the other employees. The study of Lv Y et al. (2020) showed that the prevalence of general anxiety in healthcare workers before the epidemic was 34.7% and the prevalence of mild anxiety was 24.8%, and that these rates highly increased during the epidemic period. Sahin et al. (2020) reported that healthcare workers had mild or severe anxiety, approximately 17% had moderate anxiety and 27% had severe anxiety. Ataç et al. (2020) found that 52.3% of the healthcare workers had generalized anxiety disorder, and 36.9% had both generalized anxiety disorder and insomnia. It was stated that healthcare workers in China experienced depression (50.3%), anxiety (44.6%) and insomnia (34.0%) during the pandemic process (Lai at al.,2020). In the literature, it is stated that the professional commitment of healthcare workers is higher than those working in other fields (Ozmen at al.,2005; Ozdeveciogu at al.,2007; Benligiray and Sonmez., 2011). Since the studies are in the pandemic process, they are in line with the results we obtained.

According to the graduated school, there is a statistically significant difference between the scores obtained from the Covid Fear Scale; In the posthoc analysis, it was determined that this difference was due to the difference in scores between the graduates of Health Vocational High School and the nurses who had a bachelor's degree. According to the units studied; It was determined that there was a statistical difference due to the fact that nurses working in intensive care units received lower scores than those working in internal units, surgical units and polyclinics, and those working in internal units received higher points than those working in surgical units, intensive care units and covid units. Having at least a bachelor's degree in basic nursing education is extremely important for nurses to be more determined and knowledgeable as individuals who have completed their personality development. The results of the studies also show this fact (Sahin et al. 2020; Arpacioglu et al., 2021; Isik et al., 2021).

The reason why the covid fear and anxiety of nurses working in intensive care is lower than other units may be their more experienced and crisis management skills. This may have affected the interdepartmental covid fear and anxiety levels.

It was found that the Fear of Covid-19 Scale, BECK Anxiety Inventory and Professional Commitment Scale scores of the nurses with a child were higher than the scores of those who did not have children. It was determined that the Fear of Covid-19 Scale and BECK Anxiety Inventory scores of the single nurses were lower than the married ones, but Professional Commitment Scale scores of the single nurses were higher than the married ones.

In this process, single nurses may have experienced less fear and anxiety than married people, as the risk of infecting their relatives and families will be less due to the accommodation arrangement of institutions and their living alone. Due to the risk of infecting the family and children of nurses who are married and have children, this situation may have negatively affected their professional commitment.

Similarly, Aziznejadroshan et al. (2020) found that nurses who cared for covid patients and did not have children were 0.26 times less likely to experience stress and 0.45 times less likely to experience anxiety than nurses with children. Considering the difficulties experienced by nurses in providing caregivers for their children during the pandemic process and especially during quarantine periods, and the thoughts of infecting their children, it is an expected result that they experience fear and anxiety more intensely. This finding reveals the importance of supporting nurses in this process for the care of their children.

In this study, it was established that those who had problems with access to personal protective equipment experienced more fear and anxiety. Studies also reported that those who believed that there was a shortage of personal protective equipment had experienced high levels of stress (Lu at al, 2020; Chung and Yeung, 2020.

According to the units being worked for; it was found that nurses working in the intensive care unit obtained lower scores from the Fear of Covid-19 Scale. Nurses are a group of professionals who work intensively without sleep and whose workloads increase especially during the pandemic (Lai at al., 2020). Similarly, in the study of Ozgunay et al.

(2021), it was found that the perceived level of fear (67.24±26.77) was higher in anaesthesiology and reanimation doctors working in COVID-19 ICU at the beginning of the pandemic, and the perceived level of fear (40.30±24.50) was lower after 3 months. This situation is explained by the fact that while the risk of contamination and uncertainties in prevention and treatment increase the level of fear, uncertainty and fear levels decrease with the formation of algorithms and the availability of personal protective equipment (Ozgunay et al.,2021). In this study, we can explain the lower scores of the nurses working in the intensive care unit with factors such as having easier access to equipment in intensive care units, having better knowledge of algorithms, being more experienced in how to protect themselves than other clinics.

It was determined that the fear of coronavirus and anxiety increased and the professional commitment decreased as the age and professional experience increased. It was found that the fear of coronavirus increased and the professional commitment decreased as the work experience in the unit increased. Aziznejadroshan et al (2020) reported that nurses older than 35 years were three times more likely to experience stress than nurses aged under 35 years, and nurses with more than 10 years of experience tended to feel 4.65 times more stressed than nurses with less than 10 years of experience. These findings may have emerged as a result of the professional experience that increases along with the age, the negative experiences, the increase in roles and responsibilities in private life, and the fact that over time, the profession began to be seen as a means to earn money and to maintain life rather than a goal.

It was established that nurses' anxiety levels increased along with the fear of coronavirus, and there was a weak negative correlation between fear of coronavirus and anxiety and professional commitment. In the study of Newbey et al. (2020) conducted during the pandemic process in Australia, it was concluded that 11% of the participants in the study experienced health anxiety. In another study, it was found that approximately 24.9% of the students experienced anxiety (Huang at al.,2020). It is emphasized that state-funded psychological services should be provided for the nursing students to prevent alienation from the profession (Khodabakhshi-koolaee, 2020). In our study, in parallel with the literature, it was seen that the anxiety of nurses who fear of contracting Covid-19 was high, and this situation led to a decrease in their professional commitment. A study conducted during the Covid-19 process in China reported that nurses experienced intense work stress, and it was recommended that managers make new adjustments in working conditions and improve workloads by arranging shifts in order to reduce this pressure (Mo at al., 2020). It is stated that online trainings are provided to share information on how to reduce the risk of transmission among hospitalized patients, and as a result, it is aimed to reduce anxiety and stress on healthcare workers (Kang at al.,2020).

Managers should accept that it is normal for nurses to experience fear and anxiety, create appropriate working conditions for this situation, consider the psychological state of their employees, listen to them and create the most appropriate work schedules together. If this is provided, it will contribute to the nurses' feeling of value and increase their professional dependence.

Conclusion

It was determined that being married and having children, age, unit, work experience in the unit and professional experience were the factors affecting fear of coronavirus, anxiety level and professional commitment. In order to effectively cope with the fear and anxiety experienced by the nurses, related factors should be identified. Evaluation and effective management of these factors may be beneficial in increasing nurses' professional commitment and reducing resignations.

It was established that the scores of fear of coronavirus, anxiety and professional commitment differed according to the variables of age, marital status, children, years of experience in the profession, work experience in the unit and access to personal protective equipment. In particular, the finding that revealed the fact that nurses' anxiety levels increased along with the fear of coronavirus, and that their professional commitment scores decreased as their anxiety level increased, is very important. In order to increase professional commitment, it is clear that nurses should be supported psychologically in order to cope with their fears and anxiety. In addition, it is important that nurses are given the opportunity to continuously develop themselves professionally during and after the training so that they can manage crises and care for their patients in every situation and condition.

It should not be forgotten by institutions that the fear and anxiety experienced by nurses during the pandemic process reduces their professional commitment. Considering that this situation may lead to leaving the profession, it is very important to determine the policies for the risk factors associated

with fear and anxiety, such as the regulation of working conditions and the supply of protective equipment for future pandemic situations. Since epidemics have continued throughout human history, it is inevitable to experience a pandemic in the future. For this reason, the academic and psychological preparation of both nurses and nursing students is very important

References

Arpacioglu, S., Baltali, Z., Unubol, B. (2021). "Burnout, fear of Covid, depression, occupational satisfaction levels and related factors in healthcare workers in the COVID-19 pandemic". Cukurova Medical Journal 46:88-100.

Afaraghaee F., Mehrdad N., Parvizy S. (2014). Influencing factors on professional commitment in Iranian nurses: A qualitative study. Iranian Journal of Nursing and Midwifery Research, 19(3):301-30.

Ahorsu DK., Lin CY., Imani V., Saffari M., Griffiths MD., Pakpour AH. (2020). The Fear of COVID-19 Scale: Development and Initial Validation [published online ahead of print, 2020 Mar 27]. Int J Ment Health Addict, 1-9. doi:10.1007/s11469-020-00270-8

Atac O Sezerol M, Tasci Y, Hayran O. (2020). Anxiety symptoms and insomnia in healthcare workers working in the COVID-19 pandemic. Turkish Journal of Public Health,18(Special issue):47-57. https://dergipark.org.tr/tr/pub/tjph/issue/57957/767187

Aziznejadroshan P, Qalehsari M, Shaker Zavardehi F et al. (2020). Stress, Anxiety, Depression among Nurses Caring for COVID-19 Patients in Babol, Iran: A logestic Regression, PREPRINT (Version 1) available at Research Square 2020:1-26. https://doi.org/10.21203/rs.3.rs-98099/v1

Bakioglu F, Korkmaz O, Ercan H. (2020). Fear of COVID-19 and positivity: Mediating role of intolerance of uncertainty, depression, anxiety, and stress. International Journal of Mental Health and Addiction, 1-14. doi: 10.1007/s11469-020-00331-y

Barlow, D. H. (2002). Anxiety and its disorders: The nature and treatment of anxiety and panic. Guilford press.

Beck AT, Epstein N, Brown G, Steer RA. (1988). An inventory for measuring clinical anxiety: psychometric properties. J Consult Clin Psychol, 56(6):893-897. doi:10.1037//0022-006x.56.6.893

Benligiray S, Sonmez H. (2011). The Relationship Between Nurses' Professional Commitment and Other Commitment Forms: Organizational Commitment, Work Engagement and Family Commitment. Hacettepe University Faculty of Health Sciences Nursing Journal 2011;18(1), 28-40.

Blau, G. (2001). On assessing the construct validity of two multidimensional constructs: occupational commitment and occupational entrenchment. Human Resource Management Review, 11: 279-298.

Cm MO, Dokumaci H. (2022). Psychosocial Problems of Healthcare Professionals Caring for Patients with COVID-19: from a Nursing Perspective. Academic Nursing J.1(1): 36-47

Chung JP, & Yeung WS.(2020). Staff mental health self-assessment during the COVID-19 outbreak. East Asian Archives of Psychiatry, 30(1), 34. https://doi.org/10.12809/eaap2014

Cetinkaya A, Ozmen Dilek, Bayik Temel A. 2015. The validity and reliability study of the scale of professional commitment in nursing. DEUHFED, 8(2): 54-60.

De los Santos JAA, Labrague LJ. (2020). Impact of COVID-19 on the psychological well-being and turnover intentions of frontline nurses in the community: A cross-sectional study in the Philippines. medRxiv, https://doi.org/10.1101/2020.08.05.20167411

Derin N, Ilkim NS,Yayan H. (2017) Explanation of professional commitment in nurses with professional prestige. Journal of Hacettepe University Faculty of Nursing. 4(3):24-37.

Deying H, Yue K, Wengang L, Qiuying H, Xin Z, Li Xia Z. et al. (2020).Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. E Clinical Medicine 24, 1-10. doi:https://doi.org/10.1016/j.eclinm.2020.100424

Fernandez R, Lord H, Halcomb E, et al. (2020). Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. Int J Nurs Stud, 111:103637. doi:10.1016/j.ijnurstu.2020.103637

García-Reyna B, Castillo-García GD, Barbosa-Camacho FJ, et al. (2020). Fear of COVID-19 Scale for Hospital Staff in Regional Hospitals in Mexico: a Brief Report [published online ahead of print, 2020 Nov 4] [published correction appears in Int J Ment Health Addict. 2021 Jan 27;1]. Int J Ment Health Addict, 1-12. doi:10.1007/s11469-020-00413-x

Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y. Cao B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. The Lancet, 395(10223): 497–506. DOI: 10.1016 / S0140-6736 (20) 30183-5

Huang L, Lei W, Xu F, Liu H, Yu L. (2020). Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak: A comparative study. PLoS One, 15(8):e0237303. doi:10.1371/journalpone.0237303

ICN (2021).Mass trauma experienced by the global nursing workforce. https://www.icn.ch/sites/default/files/inline-files/ICN%20COVID19%20update%20report%20FINAL.pdf

Isik, M., Kirli, U., Ozdemir, P. (2021). Mental Health of Health Workers in the Covid-19 Pandemic, Turkish Journal of Psychiatry, 32(4), 225-234.

https://www.msn.com/en-us/health/health-news/an-italian-coronavirus-nurse-posted-a-picture-of-her-face-bruised-from-wearing-a-mask-to-highlight-how-much-

health-workers-are-struggling/ar-BB115QWS Available at: Accessed March 15,

Kang L, Li Y, Hu S, et al.(2020). The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. Lancet Psychiatry, 7(3):e14. doi:10.1016/S2215-0366(20)30047-X

Khodabakhshi-koolaee A. (2020). Living in home quarantine: analyzing psychological experiences of college students during Covid-19 pandemic. J Mil Med, 22(2):130-138.

Lai J, Ma S, Wang Y, et al. (2020). Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open, 3(3):e203976. Published 2020 Mar 2. doi:10.1001/jamanetworkopen.2020.3976

Lu W, Wang H, Lin Y, & Li L..(2020) Psychological status of medical workforce during the COVID-19 pandemic: A cross-sectional study. Psychiatry Research, 288(112936):1-5. doi: 10.1016/j.psychres.2020.112936

Lv Y, Zhang Z, Zeng W, et al.(2020). Anxiety and depression survey of chinese medical staff before and during COVID-19 defense. Lancet.

Mo Y, Deng L, Zhang L, et al.(2020). Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic. J Nurs Manag, 28(5):1002-1009. doi:10.1111/jonm.13014

Newby JM, O'Moore K, Tang S, Christensen H, Faasse K. (2020).Acute mental health responses during the COVID-19 pandemic in Australia. PLoS One,15(7):e0236562. Published 2020 Jul 28. doi:10.1371/journal.pone.0236562

Ornell F, Schuch JB, Sordi AO, Kessler FHP. (2020). "Pandemic fear" and COVID-19: mental health burden and strategies. Brazilian Journal of Psychiatry, 42, 232-235.

Ozdevecioglu M, Aktas A. (2007). The effect of career commitment, professional commitment and organizational commitment on life satisfaction: The role of work-family conflict. Erciyes University Journal of the Faculty of Economics and Administrative Sciences, 28: 1-20.

Ozgunay, S E, Akca F, Karasu D, Eminoglu S, Gamlı M. (2021). Evaluation of Fear Levels of Anesthetists and Prophylaxis Practices in the Coronavirus (COVID-19) Pandemic. Journal of Anesthesia (JARSS), 29(1): 5-31.

Ozmen OT, Ozer PS, Saatcioglu OY. (2005). A case study on the examination of organizational and professional commitment in academics. Journal of the Faculty of Business, 6 (2): 1-14.

Pakpour AH, Griffiths MD. (2020). The fear of COVID19 and its role in preventive behaviors. Journal of Concurrent Disorders, 2, 58-63.

Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsi E, Katsaounou P. (2020), Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis [published correction appears in Brain Behav Immun. 2021 Feb;92:247]. Brain Behav Immun, 88:901-907. doi:10.1016/j.bbi.2020.05.026

Salman M, Mustafa ZU, Asif N, et al. (2020).Knowledge, attitude and preventive practices related to COVID-19: a cross-sectional study in two Pakistani university populations [published online ahead of print, 2020 May 9]. Drugs Ther Perspect, 1-7. doi:10.1007/s40267-020-00737-7

Shanafelt T, Ripp J, Trockel M.(2020). Understanding and Addressing Sources of Anxiety Among Health Care Professionals During the COVID-19 Pandemic. JAMA, 323(21):2133-2134. doi:10.1001/jama.2020.5893

Sahin B, Hosoglu E, Onal B. (2020). Anxiety symptoms in healthcare workers and their children during the COVID-19 pandemic in Turkey. Namik Kemal Medical Journal, 8,321-330. https://dergipark.org.tr/tr/pub/nkmj/issue/57758/781331

Ulusoy M. (1993). Beck Anxiety Inventory: Validity and reliability study. (Unpublished medical dissertation). Bakirkoy Psychiatric and Neurological Diseases Hospital, Istanbul.

World Health Organizations (WHO) announces COVID-19 outbreak a pandemic. (2020). Accessed on 16.02.2021 Accessed from: http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid -19-outbreak-a-pandemic

World Health Organization's (WHO) new coronavirus (COVID-19) weekly status report dated (16.11.2022). Access date: 20.11.2022