Türkiye Klinikleri Hemşirelik Bilimleri Dergisi
Turkiye Klinikleri Journal of Nursing Sciences
Turkiye Klinikleri J Nurs Sci. 2023;15(3):753-61

ORIGINAL RESEARCH ORİJİNAL ARAŞTIRMA

DOI: 10.5336/nurses.2022-94090

Relationships Between Nurses' Emotion Management Skills and Happiness Levels During COVID-19 Pandemic: A Cross-Sectional Study

COVID-19 Pandemisi Sırasında Hemşirelerin Duygu Yönetim Becerileri ile Mutluluk Düzeyleri Arasındaki İlişkiler: Kesitsel Bir Çalışma

Şehrinaz POLAT[a], Banu TERZİ[b]

[a]Department of Nursing Management, İstanbul University Faculty of Nursing, İstanbul, Türkiye
[b]Department of Fundamentals of Nursing, Akdeniz University Faculty of Nursing, Antalya, Türkiye

ABSTRACT Objective: To investigate relationships between nurses' emotion management skills and happiness levels during coronavirus disease-2019 pandemic in Türkiye. **Material and Methods:** This research was conducted as a cross-sectional, descriptive and correlational study with a total of 349 (n=853) nurses in a university hospital in İstanbul between December 2020 and February 2021. Descriptive Information Form, Emotion Management Skill Scale and The Oxford Happiness Questionnaire-Short Form were used to collect the study data. The Kolmogorov-Smirnov test, Shapiro-Wilk test, Student's t-test, one-way analysis of variance and for multivariate analysis, linear regression analysis was used to evaluate the findings. **Results:** Average emotion management skill level of the nurses was found as 96.13±14.47, the average level of happiness was found as 22.78±4.28. Sex, working unit, expression of emotions verbally, expressing emotions as they are, controlling negative body responses, and coping and anger management scores significantly affected the total happiness score (23.6%, R^2=0.236) (F=11.639; p<0.01). **Conclusion:** Attempts to improve nurses' emotion management skills may increase their levels of happiness. Emotion management skills and levels of happiness of nurses should be at the desired level for them to make correct critical decisions on both their own lives and the patients they provide care for, their relatives, and other healthcare professionals. Events can be arranged for this.

Keywords: COVID-19; emotions; happiness; nursing; pandemic

ÖZET Amaç: Türkiye'de koronavirüs hastalığı-2019 pandemisi sırasında hemşirelerin duygu yönetimi becerileri ile mutluluk düzeyleri arasındaki ilişkileri araştırmaktır. **Gereç ve Yöntemler:** Bu araştırma, Aralık 2020-Şubat 2021 tarihleri arasında İstanbul'da bir üniversite hastanesinde toplam 349 (n=853) hemşire ile kesitsel, tanımlayıcı ve ilişki arayıcı olarak yapılmıştır. Araştırmanın verilerini toplamak için Tanımlayıcı Bilgi Formu, Duygu Yönetimi Beceri Ölçeği ve Oxford Mutluluk Anketi-Kısa Formu kullanıldı. Bulguların değerlendirilmesinde Kolmogorov-Smirnov testi, Shapiro-Wilk testi, Student t-testi, tek yönlü varyans analizi ve çok değişkenli analiz için doğrusal regresyon analizi kullanıldı. **Bulgular:** Hemşirelerin duyguları yönetim becerisi toplam puan ortalaması 96,13±14,47, mutluluk düzeyi toplam puan ortalaması 22,78±4,28 olarak bulundu. Cinsiyet, çalışma birimi, duyguları sözlü olarak ifade etme, duyguları olduğu gibi ifade etme, olumsuz vücut tepkilerini kontrol etme, başa çıkma ve öfke yönetimi puanları toplam mutluluk puanını anlamlı olarak etkilemiştir (%23,6, R2=0,236) (F=11,639; p<0,01). **Sonuç:** Hemşirelerin duygu yönetimi becerilerini geliştirmeye yönelik girişimler mutluluk düzeylerini artırabilir. Hemşirelerin hem kendi yaşamları hem de bakım verdikleri hastalar, yakınları ve diğer sağlık çalışanları ile ilgili doğru kritik kararlar alabilmeleri için duygu yönetimi becerileri ve mutluluk düzeyleri istenilen düzeyde olmalıdır. Bunun için etkinlikler düzenlenebilir.

Anahtar Kelimeler: COVID-19; duygular; mutluluk; hemşirelik; pandemi

The novel coronavirus disease-2019 (COVID-19) has left its mark on 2019-2020 globally and continued its effect into 2022. According to the data of the World Health Organization (WHO) dated July 25th, 2022, 575,376,860 COVID-19 cases and 6,403,346 deaths have been reported worldwide. In

Correspondence: Banu TERZİ
Department of Fundamentals of Nursing, Akdeniz University Faculty of Nursing, Antalya, Türkiye
E-mail: banuterzi@akdeniz.edu.tr

Peer review under responsibility of Turkiye Klinikleri Journal of Nursing Sciences.

Received: 31 Oct 2022 ***Received in revised form:*** 06 May 2023 ***Accepted:*** 07 Jun 2023 ***Available online:*** 15 Jun 2023

Türkiye, the number of total cases is 209.961, number of deaths is 5.300 and the total number of recovered people is 190.390 according to the official data of July 25, 2022.[1] The COVID-19 pandemic has led to crises that are difficult to manage. Nurses, who are the frontline health workers in the fight against the pandemic, play a key role in the care management of patients who are COVID-19-positive.[2] During the pandemic, nurses take on various duties in addition to providing care, such as human resource and supply management, education, supervision, and social support.[3]

It is known that nurses actively participate in anti-epidemic work during natural disasters and infectious disease and make a selfless and altruistic contribution by sacrificing their own needs.[4] It is stated that nurses may experience physical and mental health problems such as loneliness, anxiety, fear, tiredness, and sleep disorders in case of contagious infection.[5-7] At the beginning of the pandemic, nurses experienced tiredness, discomfort, and despair caused by the busy work schedule and the struggle to protect themselves from getting infected. They also experienced negative emotions such as anxiety caused by lack of knowledge on the fight against COVID-19 and environmental changes, apprehension on the poor prognosis of the patients, difficulty in adapting to the unusual situation.[8] On the other hand, contrary to some studies, nurses also exhibited positive emotions during the pandemic such as confidence, calmness, and happiness, which emerged gradually besides negative emotions.[8-10]

Emotions, which are vital for surviving, living, and improving social relationships are divided into two main groups as positive and negative emotions. Negative emotions (e.g. fear, anger, sadness, grief) lead to unhappiness and a lack of confidence and cause individuals to perceive both themselves and others negatively. Happiness, love, and pleasure are considered positive emotions.[11] Emotions that allowed humanity to survive since their existence can become detrimental with increased intensity or disturbed balance. Emotion management is based on trust and it is defined as the ability to distinguish real values from dreams and emotional expectations in decision-making and manage the way of reflecting emotions at the desired level without harming others.[12] Happiness is defined as the fulfilment of a need or a pleasurable feeling felt when a goal is reached. Reasons and criteria for happiness may change frequently. Happiness has physical, psychological, emotional, social, and occupational dimensions. Real happiness can only be achieved by reaching all these dimensions.

The COVID-19 pandemic caused nurses to experience numerous positive and negative emotions.[8-10,13] However, there were no studies examining nurses' emotional management skills and happiness levels during the pandemic. It is thought that nurses whose focus of service is human can be happy if their ability to manage emotions is high, and thus their care management skills can improve. In this direction, this study was conducted to investigate the nurses' emotions and happiness level and their relationships during the pandemic.

This study sought answers to the following questions:

- What are the nurses' emotion management skills and their happiness levels during the COVID-19 pandemic?
- Is there a relationship between nurses' emotion management skills and their happiness levels during the COVID-19 pandemic?
- What factors affect the emotion management skills and happiness levels of nurses during the COVID-19 pandemic?

MATERIAL AND METHODS

STUDY DESIGN AND PARTICIPANTS

All registered nurses in the units were included in the survey (N=853). The following formula was used according to the sample calculation method for a known population $n=N\times t^2\times p\times q/d^2(N\text{-}1)+t^2\times p\times q$):[14] Where N=the number of individuals in the population, n=the number of people included in the sample, p=the frequency of the incident (0.5), q=the frequency of the non-occurrence of the incident ([1-p)=0.5), t=the theoretical value found in the t table for the specified degree of freedom and margin of error (1.96), and d=the desired incident according to the frequency of the in-

cident (0.05). The minimum number of samples required was calculated to be 265 [N=853, $n = N \times t^2 \times p \times q / d^2 (N - 1) + t^2 \times p \times q)$; n=853x1.96x1.96x0.5x0.5=819.9712/(0.05x0.05)x852+(1.96x1.96x0.5x0.5)=2.13+0.9604=3.0904, N=264.85=265]. The questionnaire was distributed to 371 nurses in total by adding 40% of the minimum sample number (103 questionnaires) considering the losses to the minimum sample number. The 349 questionnaires were returned (response rate: 94%).

MEASURES

Descriptive Information Form

This form was created by researchers. In the form, there are only questions that question sociodemographic information (such as age, sex, marital status, educational status, etc.).

Emotion Management Skill Scale

The Emotion Management Skill Scale (EMSS), developed by Çeçen, is a five-point Likert self-report scale (1=Totally disagree-5=Totally agree).[15] Cronbach's alpha coefficient for the scale was 0.83, and 0.79, 0.67, 0.65, 0.64, and 0.62 for the subscales, respectively. The scale consists of a total of 28 questions (8 positive, 20 negative) and five subscales (verbal expression, expressing emotions, controlling negative physical reactions, coping, anger management). Negative questions are reverse scored (1, 3, 4, 5, 6, 7, 9, 11, 13, 14, 15, 16, 18, 20, 22, 23, 24, 25, 27, 28). The lowest and highest scores that can be obtained from the scale are 28 and 140, respectively.

In the study, Cronbach's alpha coefficient for the overall scale was found as 0.886, which meant that it was highly reliable.

The Oxford Happiness Questionnaire-Short Form

The Oxford Happiness Questionnaire-Short Form is an eight-item scale, which was developed by Hills and Argyle to evaluate happiness levels.[16] It was adapted to Turkish by Doğan and Akıncı Çötok It is an evaluation tool like a self-report scale.[16] The internal consistency reliability coefficient of the questionnaire was found as 0.74 by Doğan and Akıncı Çötok The Turkish version of the questionnaire is a five-point Likert scale (1=Strongly disagree, 5=Strongly agree).[17] The Turkish version of the questionnaire has seven items and the 1st and 7th items are reversed. It is a one-dimensional scale. High scores obtained from the scale indicate high levels of happiness. Cronbach's alpha values for the internal reliability of the questions of the happiness scale were found as 0.710, which is highly reliable.

DATA COLLECTION

Data were collected between December 2020 and February 2021. Data collection tools were given to all nurses working at the hospitals and collected a week later. Nurses who were willing to participate in the research completed the questionnaires during their breaks on day shifts. It took 15 minutes for the nurses to answer the questions. There was no interaction with the nurses while they completed the questionnaires.

DATA ANALYSES

The Number Cruncher Statistical System (Kaysville, Utah, USA) program was used for statistical analyses. Descriptive statistical methods (average, standard deviation, median, frequency, percentage, minimum, maximum) were used to evaluate the research data. The t-test was used to compare two normally distributed groups. One-way analysis of variance was used to compare groups with three or more normal distributions. In addition, when a statistically significant difference was detected between the groups, the Bonferroni test, which is one of the post-hoc tests and based on the t-test, was used to look at which groups were different from each other. For multivariate analysis, linear regression analysis was used to evaluate the effects of other risk factors on the happiness scale total score. The minimum significance level was taken as $p<0.05$.

ETHICAL APPROVAL

The Human Rights Declaration of Helsinki was abided by throughout the study. Written ethical board consent was obtained from the head of the İstanbul Faculty of Medicine Clinical Research Ethics Committee (date: December 18, 2020, no: 31).

RESULTS

The results of the research were analyzed under four headings:

NURSES' CHARACTERISTICS AND THEIR EMOTION MANAGEMENT SKILLS AND HAPPINESS LEVELS

The average age of the nurses was 34.77±8.75, and 86.8% (n=303) were female. One hundred eighty-three (52.4%) were married, 78.5% (n=274) had bachelor's degrees, and 37.8% (n=132) worked in inpatient clinics. The average duration of working as a nurse was 12.74±9.12 years, the average duration of working in the current unit was 9.10±8.16 years, and the majority (62.5%, n=218) worked in rotating shifts.

Regarding the EMSS, the average subscale scores of "Expression of emotions verbally" and "Expression of emotions as they are" were found as 24.37±5.24 and 21.62±4.28, respectively. The average subscale scores of "Controlling negative body responses," "Coping," and "Anger management" were 11.34±3.06, 13.91±2.77, and 10.68±2.52, respectively. The average score of the overall scale was 96.13±14.47. The average score of the happiness scale was 22.78±4.28.

THE RELATIONSHIP BETWEEN NURSES' EMOTION MANAGEMENT SKILL LEVELS AND THEIR HAPPINESS LEVELS

A statistically significant weak positive relationship was found between the emotion management skill total average score and total happiness score (r=0.415; p=0.001; p<0.01) (Table 1).

EVALUATION OF NURSES' EMOTION MANAGEMENT SKILLS AND LEVEL OF HAPPINESS IN TERMS OF THEIR CHARACTERISTICS

Average age of nurses had a positive statistically significant very weak relationship with coping scores (r=0.189; p=0.001; p<0.01) and anger management scores (r=0.138; p=0.010; p<0.05). The duration of working as a nurse had a statistically significant very weak positive relationship with coping scores (r=0.193; p=0.001; p<0.01), anger management scores (r=0.145; p=0.007; p<0.01), and emotion management skills total scores (r=0.139; p=0.009; p<0.01).

Emotion management skills total scores of female nurses were higher than for male nurses (p=0.001; p<0.01). A statistically significant difference was found in total happiness scores in terms of

TABLE 1: Relationship between Emotion Management Skill Scale and Happiness Scale scores.

		Emoinot Management Skill Scale					
		Expression of emotions verbally	Expression of emotions as they are	Controlling negative body responses	Coping	Anger management	Total
Expression of emotions verbally	r	1.000	0.772	0.387	0.292	0.443	0.847
	p	-	0.001**	0.001**	0.001**	0.001**	0.001**
Expression of emotions as they are	r	-	1.000	0.323	0.348	0.577	0.852
	p	-	-	0.001**	0.001**	0.001**	0.001**
Controlling negative body responses	r	-	-	1.000	0.217	0.328	0.535
	p	-	-	-	0.001**	0.001**	0.001**
Coping	r	-	-	-	1.000	0.535	0.638
	p	-	-	-	-	0.001**	0.001**
Anger management	r	-	-	-	-	1.000	0.711
	p	-	-	-	-	-	0.001**
Total	r	-	-	-	-	-	1.000
	p	-	-	-	-	-	-
Happiness Scale	r	0.365	0.296	0.298	0.320	0.256	0.415
Total	p	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**

**p<0.01; r: Pearson coefficient of correlation.

sex (p=0.005; p<0.01), and the total happiness scores of female nurses were higher than for male nurses (Table 2).

Nurses with postgraduate degrees had higher scores of anger management compared with nurses with bachelor's degrees (p=0.010; p<0.05). Nurses with postgraduate degrees had higher average total scores of emotion management skills verbally compared with nurses with associate's or bachelor's degrees (p=0.027; p=0.001; p<0.05, respectively) (Table 2).

The emotion management skill total scores of nurses working in operating rooms (OR) were higher than those of nurses working in intensive care units (ICU) (p=0.017; p<0.05). The total happiness scores of nurses working in wards were higher compared with those of nurses working in emergency departments (ED) (p=0.014; p<0.05) (Table 2).

The total emotion management skill scores of nurses working day shifts were significantly higher than for nurses working rotating shifts (p=0.004; p<0.01). No statistically significant difference was found in total happiness scores in terms of shift types (p>0.05) (Table 2).

RESULTS OF THE REGRESSION ANALYSIS ON THE FACTORS AFFECTING THE HAPPINESS LEVEL OF NURSES

The results of the analyses showed that sex, working unit, scores of expression of emotions verbally, scores of expression of emotions as they are, controlling negative body responses scores, coping scores, and anger management scores affected the

TABLE 2: Evaluation of the scale scores according to demographic and occupational characteristics.

			Emotion Management Skill Scale						
			Expression of emotions verbally	Expression of emotions as they are	Controlling negative body responses	Coping	Anger management	Total	Happiness Scale total score
		n	X̄±SD	X̄±SD	X̄±SD	X̄±SD	X̄±SD	X̄±SD	X̄±SD
Sex	Female	303	24.61±5.41	21.88±4.33	11.18±3.12	14.13±2.69	10.78±2.54	96.92±14.85	23.02±4.20
	Male	46	22.78±3.50	19.87±3.53	12.37±2.42	12.48±2.87	10.00±2.24	90.93±10.38	21.11±4.51
	Test value; [a]p		t: 3.038;	t: 3.008;	t: -2.979;	t: 3.842;	t: 1.964;	t: 3.415;	t: 2.848;
			p=0.003	***p=0.003***	***p=0.004***	***p=0.001***	***p=0.049****	***p=0.001***	***p=0.005***
Marital status	Married	183	24.63±4.75	21.52±4.19	11.75±3.02	14.05±2.87	10.88±2.57	97.00±13.71	22.95±4.20
	Single	166	24.09±5.72	21.72±4.40	10.89±3.06	13.75±2.65	10.45±2.45	95.17±15.24	22.57±4.37
	Test value; [a]p		t: 0.950;	t: -0.432;	t: 2.652;	t: 1.017;	t: 1.590;	t: 1.182;	t: 0.837;
			p=0.343	***p=0.666***	***p=0.008***	***p=0.310***	***p=0.113***	***p=0.238***	***p=0.403***
Educational status	High school	19	24.68±4.32	21.89±4.19	12.00±3.13	14.53±2.57	11.32±2.89	100.00±14.88	24.63±2.73
	Associate's	14	22.21±4.41	19.93±3.29	11.14±2.44	15.07±2.46	11.86±1.29	92.14±9.21	22.64±3.86
	Bachelor's	274	24.09±5.45	21.26±4.32	11.16±3.05	13.73±2.82	10.41±2.48	94.76±14.55	22.66±4.40
	Graduate	42	26.76±3.56	24.38±3.23	12.24±3.21	14.45±2.49	11.71±2.54	104.62±12.00	22.64±4.14
	Test value; [b]p		F: 4.095;	F: 7.622;	F: 1.831;	F: 2.095;	F: 4.987;	F: 6.764;	F: 1.271;
			p=0.007	***p=0.001***	***p=0.141***	***p=0.101***	***p=0.002***	***p=0.001***	***p=0.284***
Unit	Service	132	24.41±5.37	21.94±4.36	11.57±3.25	14.18±2.72	10.86±2.31	97.09±15.07	23.61±4.05
	Operating room	59	25.12±4.81	22.14±3.68	11.69±2.39	14.66±2.73	11.61±2.63	99.86±12.79	22.29±4.72
	Intensive care unit	110	24.23±5.32	21.00±4.58	11.12±2.73	13.69±2.64	9.92±2.57	94.15±14.34	22.61±4.00
	Energency	48	23.69±5.19	21.52±3.99	10.77±3.85	12.75±2.88	10.75±2.39	93.44±14.20	21.42±4.61
	Test value; [b]p		F: 0.702;	F: 1.311;	F: 1.256;	F: 5.085;	F: 6.595;	F: 2.791;	F: 3.656;
			p=0.551	***p=0.271***	***p=0.289***	***p=0.002***	***p=0.001***	***p=0.040****	***p=0.013****
Shift	Day shift	131	24.89±5.24	22.12±3.59	11.38±2.90	14.69±2.71	11.41±2.14	98.97±14.15	22.96±3.86
	Rotating shift	218	24.06±5.22	21.32±4.63	11.31±3.16	13.44±2.70	10.23±2.63	94.42±14.42	22.65±4.52
	Test value; [a]p		t: 1.421;	t: 1.816;	t: 0.206;	t: 4.196;	t: 4.569;	t: 2.873;	t: 0.655;
			p=0.156	***p=0.070***	***p=0.837***	***p=0.001***	***p=0.001***	***p=0.004***	***p=0.513***

[a]Student's t-test; [b]One-way analysis of variance; **p<0.01; *p<0.05; SD: Standard deviation.

TABLE 3: Results of the regression analysis on the factors affecting total happiness score.

	Unstandardized coefficients			95% CI for B	
	B	t	p	Lower	Upper
(Constant)	10.964	7.554	***0.001****	8.109	13.819
Expression of emotions verbally score	0.223	3.516	***0.001****	0.098	0.347
Expression of emotions as they are score	-0.060	-0.725	*0.469*	-0.223	0.103
Controlling negative body responses score	0.248	3.277	***0.001****	0.099	0.396
Coping score	0.297	3.288	***0.001****	0.120	0.475
Anger management score	0.020	0.174	*0.862*	-0.205	0.245
Sex (female)	1.302	2.020	***0.044****	0.034	2.570
Unit Operating room	-1.599	-2.666	***0.008****	-2.780	-0.419
Intensive care unit	-0.531	-1.046	*0.296*	-1.531	0.468
Emergency department	-1.290	-1.970	***0.049****	-2.578	-0.002

**p<0.01; *p<0.05; CI: Confidence interval.

total happiness score by 23.6% (R^2=0.236) and the model was statistically significant (F=11.639; p=0.001; p<0.01) (Table 3).

DISCUSSION

It is reported that the threat of epidemic causes numerous negative emotions such as physical exhaustion, psychological despair, alienation in personal relationships, fear, anxiety, and despair.[5,7] How nurses manage their emotions and their levels of happiness during a pandemic is an important topic to be investigated. In this study, the relationships between the nurses' emotion management styles and their levels of happiness were investigated.

In the study, nurses' happiness levels were moderate although their emotion management skills were high. Similarly, in another study conducted in Iran, nurses were found to be moderately happy.[18] During the COVID-19 pandemic, the frontline nurses experienced a combination of positive and negative emotions. Negative emotions were dominant at the early stage and positive emotions emerged gradually. During this period, the coping mechanisms that the nurses developed by themselves and their psychological development were thought to be important in maintaining mental health.[8]

In the study, nurses happiness levels increased as their emotion management skill levels increased. Emotions can become detrimental with increased intensity or disturbed balance. Therefore, every emotion should be managed according to the current situation and environment and its intensity should be balanced.[12] A study conducted in Türkiye states that nurses experienced high levels of depression, anxiety, and stress.[19] There may be numerous factors affecting the relationship between the emotion management skills and happiness level of nurses, who work at risk and in intensive and chaotic environments. These factors can be listed as negative emotions experienced when providing care for patients with COVID-19, fear of getting infected, heavy and hard work conditions, increasing numbers of patients, ineffective management, health policies of countries, limited administrative support, unfair wages, insufficient personal protective equipment, and not being able to use personal rights (e.g. leave, retirement, promotion).[13,18,20]

In the study, it was found that female nurses were better than male nurses at expressing their emotions verbally, expressing their emotions as they are, coping with their emotions, and managing their anger. On the other hand, it was seen that male nurses were better at controlling negative body responses. Furthermore, it was identified that female nurses were better at controlling their emotions in general and they were happier than male nurses. Another study that investigated the emotion management skills of ED nurses similarly found that women had higher emotion management skill level than men.[12] There were more female nurses than male nurses in the sample of our research and this might have af-

fected the result that women had higher emotion management skills and happiness levels. In addition to the risk of infection, nurses who successfully managed the chaos during the COVID-19 pandemic had to deal with other emotional situations such as anxiety and fear caused by the heavy work conditions and witnessing the pain and deaths of patients. Nurses risk their lives when fulfilling their duties by working under physical and emotional pressure.[21] Khosrojerdi et al. stated that happiness was the main predictor of satisfaction with mental health.[18] The fact that nurses achieved happiness by successfully managing their emotions during the pandemic may indicate that they developed various coping mechanisms that were good for their mental health. In this direction, emotion management skills and happiness can be investigated in terms of mental health.

In the study, it was found that married nurses controlled their negative body responses better than single nurses, and nurses with postgraduate degrees were better than others in managing their emotions. In a study by Ülger, it was found that married nurses were better at expressing their emotions verbally compared with single nurses, and nurses with postgraduate and bachelor's degrees were better than others in expressing their emotions as they are.[12] Besides fighting the pandemic, the COVID-19 pandemic has forced nurses to adapt and cope with numerous situations. For example, married nurses had to live apart from their spouses, children, and loved ones for a long time during the pandemic by staying at other places (e.g. dormitories, hotels, empty homes of relatives) rather than going home because of the risk of infection.[19,20] The negative emotions they experienced during this period may have become an opportunity for them to develop their emotion management skills.

In the study, it was found that the nurses working in wards and ORs were better than the ED nurses at coping with their emotions and managing their anger. The emotion management skill levels of nurses working in ORs were higher than those of nurse working in ICUs. Nurses working in wards were happier than nurses working in EDs. In a study that compared the emotional responses and coping strategies of nurses and nursing students, it was found that frontline nurses expressed more anxiety, fear, sadness, and anger compared with nursing students. Moreover, it was reported that nurses felt defeated and guilty when they lost their patients despite all medical interventions.[22]

In the study, the coping and anger management skill levels of nurses working day shifts were higher than those of nurses working rotating shifts. The emotion management skill levels of nurses working day shifts were higher than those of nurses working rotating shifts. Contrary to the results of our study, the emotion management skill levels of ED nurses were found to be higher.[12] Working rotating shifts during the COVID-19 pandemic creates a crisis in itself. It is especially difficult to manage emotions and cope with problems such as the lack of personal protective equipment, managing emergencies, and the basic needs of nurses (e.g. nutrition, resting, sleeping, excretion) while working in clinics with patients who are COVID-19 positive.[19,20,22]

In the study, expression of emotions verbally, controlling negative body responses, high coping skill levels, and being female were found to have an increasing effect on happiness levels. It was seen that the level of happiness decreased in nurses working in ORs and EDs. In another study conducted with nurses in Iran, it was found that factors such as quality of life, working fixed shifts, shorter work hours, high job satisfaction, and the behaviors of other healthcare staff were predictors of happiness. Nurses working in psychiatry clinics were reported to be happier than nurses working in other clinics.[18] In the hospital in Türkiye where the research was conducted, ORs were rapidly converted to ICUs and OR nurses had to work unwillingly and inexperienced in the COVID-19 ICUs during the COVID-19 outbreak. The intensity of the patients presenting to EDs with COVID-19 suspicion or diagnosis caused EDs to become more complex places. Therefore, it is inevitable that the OR and ED nurses in the study had low levels of happiness. It is also known that mental health and satisfaction levels are the primary predictors of happiness. According to the WHO, mental health consists of subjective welfare, self-efficacy, autonomy, and self-realization of the emotional potentials.[18]

Positivity is considered to be a characteristic that can help to preserve the happiness and mental health of people due to its protective role.[23]

LIMITATIONS OF THE RESEARCH

The limitations of the research are that the study sample was not limited to nurses working in COVID-19 clinics and other factors that might affect emotions were not addressed.

CONCLUSION

In the study, it was found that nurses' have high emotion management skills and moderate levels of happiness in pandemic. Measures should be taken to maintain nurses' high emotion management skills and to increase their happiness levels. For this, necessary improvements should be made in institutional activities and health policies. Emotion management is important in decisions made during crises. Therefore, further studies can be conducted to investigate the decision-making and communication skills of nurses during the COVID-19 pandemic in addition to their emotion management skills. On the other hand, happiness should not only be considered as pleasure, positive emotional experience, nice feelings and joy. Other factors related to workplace and work conditions that affect happiness should also be addressed.

Acknowledgements

Thanks to all the nurses who participated in the study.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

REFERENCES

1. World Health Organization [Internet]. [Cited: July 25, 2022]. WHO Coronavirus Disease (COVID-19) Dashboard, 2022. Available from: [Link]
2. Choi KR, Skrine Jeffers K, Cynthia Logsdon M. Nursing and the novel coronavirus: risks and responsibilities in a global outbreak. J Adv Nurs. 2020;76(7):1486-7. [Crossref] [PubMed] [PMC]
3. Kıraner K, Terzi B, Kelez Yayık A, Aydoğan S, Doğanay Ö, Yakut T, et al. COVID-19 pandemi sürecinde yoğun bakım hemşiresinin rolü [The role of the intensive care nurse in the COVID-19 pandemic process]. İzmir Katip Çelebi University Faculty of Health Science Journal. 2021;6(1):45-8. [Link]
4. Aliakbari F, Hammad K, Bahrami M, Aein F. Ethical and legal challenges associated with disaster nursing. Nurs Ethics. 2015;22(4):493-503. [Crossref] [PubMed]
5. Kim Y. Nurses' experiences of care for patients with Middle East respiratory syndrome-coronavirus in South Korea. Am J Infect Control. 2018;46(7):781-7. [Crossref] [PubMed] [PMC]
6. Khalid I, Khalid TJ, Qabajah MR, Barnard AG, Qushmaq IA. Healthcare workers emotions, perceived stressors and coping strategies during a MERS-CoV outbreak. Clin Med Res. 2016;14(1):7-14. [Crossref] [PubMed] [PMC]
7. Liu C, Wang H, Zhou L, Xie H, Yang H, Yu Y, et al. Sources and symptoms of stress among nurses in the first Chinese anti-Ebola medical team during the Sierra Leone aid mission: a qualitative study. Int J Nurs Sci. 2019;6(2):187-91. [Crossref] [PubMed] [PMC]
8. Sun N, Wei L, Shi S, Jiao D, Song R, Ma L, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. Am J Infect Control. 2020;48(6):592-8. [Crossref] [PubMed] [PMC]
9. Kang L, Li Y, Hu S, Chen M, Yang C, Yang BX, et al. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. Lancet Psychiatry. 2020;7(3):e14. [Crossref] [PubMed] [PMC]
10. Xiang YT, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. Lancet Psychiatry. 2020;7(3):228-9. [Crossref] [PubMed] [PMC]
11. Sisley R, Smolian R. Emotional labour and self-determination theory: a continuum of extrinsic and intrinsic causes of emotional expression and control. New Zealand Journal of Employment Relations. 2012;38(2):41-57. [Link]
12. Ülger İ. Acil serviste çalışan hemşirelerin duygu yükleri ve duygu yönetim becerilerinin belirlenmesi [Yüksek lisans tezi]. Gaziantep: Hasan Kalyoncu Üniversitesi; 2018. [Erişim tarihi: 24 Nisan 2020]. Erişim linki: [Link]
13. Shen X, Zou X, Zhong X, Yan J, Li L. Psychological stress of ICU nurses in the time of COVID-19. Crit Care. 2020;24(1):200. [Crossref] [PubMed] [PMC]
14. Büyüköztürk Ş, Kılıç Çakmak E, Akgün ÖE, Karadeniz Ş, Demirel F. Bilimsel Araştırma Yöntemleri.17. baskı. Ankara: Pegem Akademi; 2014.
15. Çeçen AR. Duyguları Yönetme Becerileri Ölçeğinin geliştirilmesi: geçerlik ve güvenirlik çalışmaları [Validity and reliability studies of the Emotions Management Skills Scale (EMSS)]. Turkish Psychological Counseling and Guidance Journal. 2006;3(26):101-13. [Link]

16. Hills P, Argyle M. The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. Personality and Individual Differences. 2002;33(7):1073-82. [Crossref]

17. Doğan T, Akıncı Çötok N. Oxford Mutluluk Ölçeği Kısa Formunun Türkçe uyarlaması: geçerlik ve güvenirlik çalışması [Adaptation of the Short Form of the Oxford Happiness Questionnaire into Turkish: A validity and reliability study]. Turkish Psychological Counseling and Guidance Journal. 2011;4(36):165-70. [Link]

18. Khosrojerdi Z, Tagharrobi Z, Sooki Z, Sharifi K. Predictors of happiness among Iranian nurses. Int J Nurs Sci. 2018;5(3):281-6. [Crossref] [PubMed] [PMC]

19. Alan H, Eskin Bacaksiz F, Tiryaki Sen H, Taskiran Eskici G, Gumus E, Harmanci Seren AK. "I'm a hero, but…": an evaluation of depression, anxiety, and stress levels of frontline healthcare professionals during COVID-19 pandemic in Turkey. Perspect Psychiatr Care. 2021;57(3):1126-36. [Crossref] [PubMed]

20. Kıraner E, Terzi B. Covid-19 pandemi sürecinde yoğun bakım hemşireliği [Intensive care nursing in Covid-19 pandemic process]. J Criti Care. Nurs 2020;24(Suppl-1):83-8. [Link]

21. Catton H. Global challenges in health and health care for nurses and midwives everywhere. Int Nurs Rev. 2020;67(1):4-6. [Crossref] [PubMed] [PMC]

22. Huang L, Lei W, Xu F, Liu H, Yu L. Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak: a comparative study. PLoS One. 2020;15(8):e0237303. [Crossref] [PubMed] [PMC]

23. Yıldırım M, Güler A. Positivity explains how COVID-19 perceived risk increases death distress and reduces happiness. Pers Individ Dif. 2021;168:110347. [Crossref] [PubMed] [PMC]