ORIGINAL ARTICLE

Medicine Science
International
Medical Journal

The relationship between fear against Covid-19 and emotional expression in nursing students

Fatma Melike Erkan, Funda Kavak Budak

Inonu University, Faculty of Nursing, Nursing, Malatya, Turkey

Abstract

Emotional expression is important for body and mental health in these days of fear of Covid-19. This research was aimed to determine the relationship between the fear of covid-19 and emotional expressions of nursing students with high awareness and contact possibility for covid-19. The sample size of the research consisted of 313 nursing students determined by power analysis. In the study, "Socio-Demographic Characteristics Form", "Covid-19 Fear Scale" and "Berkeley Emotional Expression Scale" were used as data collection tools. It was determined that the total mean score of the participants was 79.09 ± 16.37 on the Berkeley Emotional Expression Scale and 17.11 ± 5.85 on the Covid-19 Fear Scale. In the study, it was determined that there is a positive, weakly and significant correlation between the students' fear of covid-19 and their emotional expressions. As the nursing students' fear of covid-19 increases, their emotional expressions increase. It is necessary to develop environments in which nursing students can express their emotions and work to increase their level of expression. It is necessary to develop environments in which nursing students can express their emotions and work to increase their level of expression. Psychological support units can be established in hospitals and schools under the leadership of related psychiatric nurses.

Keywords: Covid-19, fear, emotional expression, nursing students

Introduction

In December 2019, a new type of coronavirus (Covid-19) epidemic occurred locally in the Hubei region of China, and this epidemic affected the whole world in a short time [1]. The World Health Organization (WHO) declared this epidemic as a pandemic, stating that the world is facing a serious problem [2]. In addition to physically affecting people, the Covid-19 epidemic causes uncertainties due to the nature of the epidemics, so people perceive the dangerous situation and this situation negatively affects human psychology and causes fear [1, 3].

In these days of the Covid-19 pandemic, we had to meet a new concept of fear. This fear has been dubbed the fear of covid-19 by researchers [4]. Studies show that individuals experience high levels of fear and anxiety [5-7]. Jiang et al. In the study conducted by Covid-19 on the effect of the epidemic, it was observed that emotional expression was more inhibited in the group with the highest stress level compared to post-traumatic stress symptoms [8]. People can often suppress the fear they experience during the Covid-19 process or express their emotional reactions in different ways.

The transformation of the emotional experiences of individuals into behavior is called emotional expression [9]. Emotional expression patterns differ according to individuals [10]. Suppression of emotions causes psychological problems such as depression and anxiety while expressing emotions benefits both body and mental health [11].

Emotional expression is important for body and mental health in these days of fear of Covid-19. It is estimated that people who reflect their sense of fear against Covid-19 will be less likely to experience negative health-related experiences. This research was aimed to draw attention to the relationship between the fear of covid-19 and emotional expressions of nursing students, one of the groups with high awareness and contact possibility for covid-19, and the importance of emotional expression. In studies on the effect of Covid-19 on nursing students, it has been observed that nursing students experience serious anxiety and fear about economic uncertainty, fear for the health of their families, fear of infection,

*Corresponding Author: Funda Kavak Budak, Inonu University, Faculty of Nursing, Nursing, Malatya, Turkey, E-mail: funda-kavak@hotmail.com

and the difficulties of distance education [12]. For this reason, it is thought that examining the relationship between nursing students' fear of covid-19 and their emotional expressions will contribute to the literature and will be a guide for new strategies to be created.

While there are few studies in the literature on the fear of covid-19 in nursing students during the pandemic process [13, 14], it has been observed that there is no study that examines the fear of covid-19 and the concept of emotional expression together. In this research, it was aimed that nursing students protect their mental and physical health by expressing the sense of fear they experience for covid-19.

The purpose of this study is to determine the relationship between fear of covid-19 and emotional expression in nursing students.

The research searches for an answer to the following question:

-What are the levels of nursing students' fear of covid-19?

-What are the levels of emotional expression of nursing students?

-Is there a relationship between fear of covid-19 and emotional expression in nursing students?

Materials and Methods

Study Design and Participants

The relational survey method was used in the cross-sectional study. This study was conducted on 313 nursing students who were studying in the 2020-2021 academic year of Inonu University and volunteered to participate in the research.

The exclusion criterion from the study was to have active covid-19.

Data Collection Tools

The data were collected using the Socio-Demographic Characteristics Form, Covid-19 Fear Scale, and Berkeley Emotional Expression Scale

Socio-Demographic Characteristics Form

The researcher created the form. In this form, the socio-demographic characteristics of the students participating in the study (age, gender, marital status, income level, status of him or his relative having a chronic disease, application status, status of him or his relative having covid-19, loss due to covid-19 status) were questioned.

Covid-19 Fear Scale

Ahorsu et al. It is a 5-point Likert-type scale organized with seven items developed by Iranians in 2020. For each option, the lowest score was determined as one and the highest score as five. It has a scoring system where the total score is evaluated between 7-35 and the higher the score, the higher the fear of COVID-19 [4]. The Turkish validity and reliability study of the scale was conducted by Satıcı et al. Made in 2020. Cronbach's Alpha value was found 0.82 in the Turkish validity and reliability study of the scale. In this study, the Cronbach's alpha value of the scale was determined as 0.88 [15].

Berkeley Emotional Expression Scale

Developed by Gross and John in 1995 to determine the participants'

levels of emotional expression, positive emotional expression (4 items), negative emotional expression (six items), and drive intensity (6 items), the scale consists of 16 items [16]. It was adapted to Turkish in 2011 by Akin. It is a self-report scale tool in which participants describe their situations. Participants answering the scale answer the given sentences with a 7-point Likert rating by marking one of the numbers between 1-7. The scale also gives a total score of emotional expression, and getting a high score means a high emotional expression. The Cronbach's alpha coefficient of the Turkish form of the scale was calculated as 82. In this study, the Cronbach's alpha value of the scale was determined as 0.87 [17].

Data Collection

The researcher between February and April 2021 applied the questionnaire and scales used in the research. Nursing students, Socio-Demographic Characteristics Form, Covid-19 Fear Scale, and Berkeley Emotional Expression Scale were sent to students' e-mails accounts through the link created from the Google Form. The time to fill out the forms took 15-20 minutes.

Data Analysis

The data were evaluated using the SPSS 24.0 (Statistical Package). In the study, $p<0.05$ was considered significant. In the study, percentile in the distribution of descriptive features, mean and standard deviation in the distribution of the scale total score averages, t-test, Mann-Whitney u test, analysis of variance, Kruskal-Wallis analysis in the independent groups were used to compare the scales and descriptive features, and Pearson correlation analysis was used in the comparison of the two scales.

Ethical Principles of the Study

Before starting the study, approval from Inonu University Health Sciences Scientific Research and Publication Ethics Committee (Approval No: 2021/1641) and legal permission from Inonu University Nursing Faculty where the research was conducted was obtained. During the application of the study, written consents were obtained by explaining the purpose of the study in the form sent to the nursing students.

Results

The average age of the research students was 21.38, 75.8% were women, 98.1% were single, 34.5% were fourth grade, 62.3% of them had income equal to their expenses, 94.6% had no chronic diseases, 56.2% of them had a chronic disease in any of their families. It was determined that any of them had a chronic disease, 55.9% of them did not apply during the pandemic period, 85.3% of them did not have covid-19, 68.7% of them had any relatives covid-19 and 77% of them did not lose any of their relatives due to covid-19.

In Table 1, when students' gender and emotional expression scale sub-dimension and total score averages are compared; A statistically significant difference was found between the mean scores of positive emotional expression, negative emotional expression, impulse intensity, and emotional expression, which are sub-dimensions of the scale ($p <.05$). Female students have higher emotional expressions (Table 1).

Table 1. Comparison of Covid-19 Fear and Emotional Expression Scale Sub-Dimension and Total Score Averages According to Socio-Demographic Characteristics

Socio-Demographic Characteristics		Min-Max n	Mean±SS %	Positive Emotional Expression	Negative Emotional Expression	Impulse Violence	Emotional Expression Scale Total Score	Covid Horror Scale Total Score
Age		18-34	21.38±2.26					
	Test Value			r= -0.102	r= -0.062	r= -0.091	r= -0.096	r= 0.080
	Importance			p= .071	p= .274	p= .107	p= .090	p= .156
Gender	Male	79	25.2	18.93± 6.04	25.63 ± 7.41	26.74 ± 7.83	71.31 ± 19.08	14.92 ± 6.6
	Woman	234	75.8	21.57± 4.40	27.82± 5.69	32.33± 6.68	81.72 ± 14.47	17.85 ± 5.36
	Test Value			t=-3.568	t=-2.393	t=-5.679	t=-4.437	t=-3.535
	Importance			p= .001	p= .018	p= .001	p= .001	p= .001
Marital status	married	6	1.9	21.83 ± 1.94	30.16 ± 4.16	30.66 ± 7.50	82.66 ± 12.37	20.00 ± 7.01
	Single	307	98.1	20.88 ± 5.03	27.21 ± 6.26	30.92 ± 7.39	79.02 ± 16.45	17.05 ± 5.82
	Test Value			MWU= 920.500	MWU= 662.500	MWU= 918.000	MWU= 782.500	MWU= 662.500
	Importance			p= .998	p= .204	p= .989	p= .528	p= .238
Income rate	Less than income	99	31.6	20.11 ± 5.53	27.26 ± 6.95	30.54 ± 7.99	77.91 ± 7.99	17.21 ± 5.83
	Income is equal to expenses	195	62.3	21.27 ± 4.72	27.13 ± 5.98	30.91 ± 7.26	79.32 ± 15.65	16.84 ± 5.83
	More than income	19	6.1	21.26 ± 4.53	28.68 ± 4.78	33.00 ± 4.97	82.94 ± 8.73	19.31 ± 5.86
	Test Value			KW= 3.202	KW= 1.380	KW= .779	KW= .431	KW= 3.082
	Importance			p=.202	p=.502	p=.678	p=.806	p=.214
Grade Level	1.Class	71	22.7	21.21 ± 5.49	27.32 ± 7.48	30.85 ± 8.44	79.39 ± 19.41	16.90 ± 6.27
	2.Class	59	18.8	21.23 ± 4.14	27.23 ± 5.22	31.35 ± 7.26	79.83 ± 13.90	18.01 ± 5.63
	3.Class	75	24.0	21.22 ± 4.53	28.36 ± 5.09	31.36 ± 5.63	80.94 ± 12.19	16.32 ± 5.86
	4.Class	108	34.5	20.30 ± 5.38	26.49 ± 6.52	30.42 ± 7.84	77.22 ± 17.92	17.30 ± 5.67
	Test Value			F= 0.796	F= 1.331	F= 0.317	F= 0.837	F= 0.999
	Importance			p= .497	p= .264	p= .813	p= .474	p= .394
Chronic Disease Presence	Yes	17	5.4	22.11 ± 4.83	27.58 ± 4.15	33.82 ± 5.49	83.52 ± 10.29	19.82 ± 5.95
	No	296	94.6	20.83 ± 5.00	27.25 ± 6.34	30.75 ± 7.45	78.84 ± 16.63	16.95 ± 5.81
	Test Value			MWU= 2128.500	MWU=2356.000	MWU=2006.000	MWU= 2281.000	MWU= 1843.500
	Importance			p= .284	p= .659	p= .159	p= .517	p= .063
Chronic Illness in Family	Yes	176	56.2	21.27 ± 4.83	27.22 ± 6.09	31.31 ± 7.71	79.81 ± 16.47	17.89 ± 6.06
	No	137	43.8	20.43 ± 5.18	27.32 ± 6.44	30.42 ± 6.95	78.18 ± 16.26	16.10 ± 5.42
	Test Value			t=1.469	t=-0.132	t=1.056	t=0.873	t=2.721
	Importance			p= .143	p= .895	p= .292	p= .383	p= .007
Did you come into practice during the pandemic period	Yes	138	41.1	20.57 ± 4.89	27.17 ± 5.87	30.84 ± 6.88	78.59 ± 15.09	16.82 ± 5.29
	No	175	55.9	21.17 ± 5.07	27.34 ± 6.52	30.98 ± 7.78	79.49 ± 17.34	17.33 ± 6.26
	Test Value			t=-1.053	t=-0.237	t=-0.160	t=-0.484	t=-0.782
	Importance			p= .293	p= .812	p= .873	p= .629	p= .435
Did you have Covid-19	Yes	46	14.4	20.45 ± 5.24	26.47 ± 7.02	30.56 ±8.47	77.50 ± 18.97	16.45 ± 5.46
	No	267	85.3	20.98 ± 4.95	27.40 ± 6.09	30.98 ± 7.20	79.37 ± 15.90	17.22 ± 5.91
	Test Value			t=-0.662	t=-0.930	t=-0.355	t=-0.717	t=-0.822
	Importance			p= .509	p= .353	p= .723	p= .474	p= .412
Has a relative of yours had Covid-19	Yes	215	68.7	20.80 ± 4.69	27.33 ± 6.02	31.02 ± 7.13	79.16 ± 15.55	17.09 ± 5.58
	No	98	31.3	21.13 ± 5.62	27.11 ± 6.72	30.70 ± 7.95	78.94 ± 18.13	17.15 ± 6.42
	Test Value			t=-0.538	t=0.298	t=0.354	t=0.109	t=-0.080
	Importance			p= .591	p= .766	p= .724	p= .913	p= .937
Have you lost a loved one because of Covid-19	Yes	72	23.0	21.38 ± 4.24	28.05 ± 5.78	32.12 ± 6.39	81.56 ± 13.63	18.00 ± 6.03
	No	241	77.0	20.76 ± 5.20	27.03 ± 6.36	30.56 ± 7.63	78.36 ± 17.06	16.84 ± 5.78
	Test Value			t=1.039	t=1.221	t=1.576	t=1.462	t=1.471
	Importance			p= .300	p= .223	p= .116	p= .145	p= .142

In the study, when the socio-demographic characteristics of the students were compared with the Covid-19 Fear Scale total score average; While there is no statistically significant difference between marital status, income level, class level, presence of chronic illness, presence of a diagnosed mental illness, presence of chronic illness in the family, the status of having covid-19, loss of a relative due to covid-19 and the scale total score average (p>.05), gender, presence of a diagnosed mental illness, presence of chronic illness in the family, and the difference between the scale total score average is statistically significant (p<.05). Those in the female gender group and those with chronic diseases in their family have a higher fear of covid-19 (Table 1).

The lowest score the students got from the emotional expression scale total score was 17, the highest score was 112, and the scale total score average was 79.09 ± 16.37. Considering the scale total score average, it can be thought that students have moderate sensory expressions (Table 2).

Table 2. Students' Emotional Expression and Covid-19 Fear Scale Total Score Averages

Emotional Expression Scale	Min-Max Puan	Mean ± SD
Positive Emotional Expression	4-28	20.90±4.99
Negative Emotional Expression	6-42	27.26±6.23
Impulse Violence	6-42	30.92±7.38
Emotional Expression Total Score	17-112	79.09±16.37
Covid-19 Fear Scale Total Score	7-35	17.11±5.85

The lowest score obtained by the students from the Covid-19 fear scale total score was seven, the highest score was 35, and the scale total score average was 17.11 ± 5.85. Considering the scale total score average, it can be thought that students have a medium level of fear (Table 2).

There is a statistically weakly significant positive correlation between the sub-dimension and total score averages of the emotional expression scale and the covid-19 fear scale total score average (p <.05). In the study, as the covid-19 fear level of the student's increases, their emotional expressions increase (Table 3).

Table 3. The Relationship between Students' Fear of Covid-19 and Emotional Expression

		Emotional Expression Scale			
		Positive Emotional Expression	Negative Emotional Expression	Impulse Violence	Total Score
Covid-19 Fear Scale	r	0.125	0.216	0.240	0.229
	p	0.027	0.001	0.001	0.001

Discussion

The results obtained as a result of this study, which was conducted to examine the relationship between fear of covid-19 and emotional expression in nursing students, were discussed in the light of the literature.

It can be thought that nursing students' fear of covid-19 is moderate. In the studies of Duman (2020) in university students, Bulca-Karadem (2020) in healthcare workers, and Gercer (2020)

in adult individuals, it was determined that they experienced a coronavirus fear at a level close to the middle [18-20]. Research findings support the literature.

It can be thought that nursing students' emotional expressions are at a moderate level. In the studies of Kaya (2013) on university students and Celik's studies on high school students in 2013 and 2015, considering the lowest and highest scores that could be taken from the scale, it was observed that the students got a score close to the middle in these studies [9, 21, 22]. The research results are in line with the literature.

It was determined that there is a statistically significant difference between the fear of covid-19 and the gender variable of the students participating in the study (p<.05). It has been found that women have a higher fear of covid-19. There are studies in the literature in parallel with our research findings. Cao et al. (2020), Rodríguez-Hidalgo et al. (2020) found that the fear of covid-19 in women was significantly higher because of the pandemic in their research with university students [23, 24]. Bakioglu et al. (2020), in their research with an adult, found that the fear of covid-19 is significantly higher in women [25].

It was determined that there is a statistically significant difference between the fear of covid-19 and the variable of chronic disease in the family of the students participating in the study (p<.05). Having an individual with a chronic disease in the family has further increased the fear of covid-19. The result of the study is compatible with the literature. In the specialty thesis of Bulca-Karadem (2020) on the fear of covid-19 in healthcare workers, the fear of covid-19 of the participants with a chronic disease in their family was statistically significantly higher than those without scale scores [19]. Guduk et al. (2021), in their study with healthcare professionals, 72% of the participants stated that they feared infecting their family members with the Covid-19 virus [26]. In a qualitative study conducted with intensive care nurses providing care for patients with a diagnosis of Covid-19, statements were made that the nurses were afraid of transmitting Covid-19 to their families/relatives [27]. The fact that our study group is a nursing students, having fear of transmitting diseases from the hospital as in healthcare professionals may be the reason for their fear of covid-19 more intensely.

It was determined that there is a statistically significant difference between the emotional expression and sub-dimensions of the students participating in the study and gender (p<.05), and women have higher levels of emotional expression than men in all sub-dimensions. In the study conducted by Celik (2013) with senior high school students, it was found that emotional expression, positive expression, negative expression, and impulse violence differ significantly according to gender and that women have more of these characteristics than men [9].

In the study, it was found that there is a statistically positive significant correlation between nursing students' fear of covid-19 and their emotional expressions (p<.05). It has been found that as the fear of covid-19 increases, emotional expression increases. Considering the correlation between fear of Covid-19 and emotional expression, the increase in emotional expressions as the level of fear increases in individuals can be considered as a protective factor. Hoyt et al., (2020) state that emotional

expression is important for individuals' mental health [28]. It was found that individuals with high emotional expression experience more happiness and less anxiety than those with low emotional expression [22]. In Celik (2013)'s study, it is observed that there is a negative relationship between hopelessness level and emotional expression and positive emotional expression [9]. In other words, as despair increases, emotional expression decreases. In the study conducted by Kaya (2013), it was determined that the level of emotional expression significantly predicted the level of social well-being [21]. In another study, the researcher mentions that revealing traumatic or stressful life events is beneficial and this is a need [29]. In addition, many types of psychotherapy (such as psychodynamic, humanistic, cognitive-behavioral) focus on the verbal expression of thoughts and feelings about the stressful/traumatic event or situation and emphasize that this is beneficial [30]. It is thought that expressing the fear experienced due to the pandemic, which is more or less traumatic for the whole society, will be beneficial for the mental and physical health of individuals.

The research is based on students' self-report. It is possible that some students avoided or exaggerated their real situation during the application. The fact that the research was conducted in a single center and the students experienced the process regarding the decisions they made during the pandemic process may be different from other centers. The insufficient number of male participants participating in the study remains a limitation that can affect the results.

Conclusion

In the study, it was determined that as the fear of covid-19 increases, emotional expression increases. To overcome the fear of Covid-19, it can be thought that it is important for individuals to have high levels of emotional expression. Therefore, it will be good for individuals to improve their emotional expression characteristics in terms of protecting their mental health. From this point of view, it is necessary to develop environments in which nursing students can express their emotions and increase their level of emotional expression to successfully overcome this period and protect their mental health. Psychological support units can be established in hospitals and schools under the leadership of related psychiatric nurses. The benefits of written emotional expression can be explained to students and supported in this regard. Students who experience high levels of covid-19 fear can be provided with expert support.

References

1. Bao Y, Sun Y, Meng S, et al. 2019-nCoV epidemic: address mental health care to empower society. The Lancet. 2020;395:37-8.

2. WHO. Statement regarding cluster of pneumonia cases in Wuhan, China: https://www.who.int/china/news/detail/09-01-2020-whostatement-regarding-cluster-of-pneumonia-cases-in-wuhan-china access date 03.12.2020

3. Sarıcam H, Erguvan FM, Akın A, et al. The Turkish short version of the intolerance of uncertainty (IUS-12) scale: The study of validity and reliability. RESS J. 2014;1:148-157.

4. Ahorsu DK, Lin CY, Imani V, et al. The fear of COVID-19 scale: development and initial validation. Int J Ment Health Addict. 2020;27:1-9.

5. Dogan MM, Duzel B. Fear-anxiety levels in particular of Covid-19. Electronic Turkish Studies. 2020;15:739-52.

6. Fitzpatrick KM, Harris C, Drawve G. Fear of COVID-19 and the mental health consequences in America. Psychol Trauma. 2020;12:17-21

7. Karatas Z. The societal effects of the COVID-19 Pandemic, change and don't get stronger. Turk J Social Work Res. 2020;4:3-17.

8. Jiang HJ, Nan J, Lv ZY, et al. Psychological impacts of the COVID-19 epidemic on Chinese people: Exposure, post-traumatic stress symptom, and emotion regulation. Asian Pac J Trop Dis. 2020;13:252.

9. Celik E. An ınvestigation of resilience characteristics of senior high school students through emotional expression. Ataturk University Social Sciences Institute J. 2013;17:221-36.

10. Araz A, Erkus A. Conceptualization and measurement of emotion expression styles: An inventory development study. Turk J Psychol. 2014;29:50-61.

11. Li L, Yang Y, He J, et al. Emotional suppression and depressive symptoms in women newly diagnosed with early breast cancer. BMC Womens Health. 2015;15:1-8.

12. Savitsky B, Findling Y, Ereli A, et al. Anxiety and coping strategies among nursing students during the covid-19 pandemic. Nurse Educ Pract. 2020;46:102809.

13. Ozsahin OGF, Aksoy OGA. COVID-19 fear levels of university students studying in health departments: A private university example. Full Text Proceedings–Health Sciences. 2020; 183.

14. Okuyan CB, Karasu F, Polat F. The effect of nursing students' fear of exposure to Covid-19 on their health anxiety levels: A university example. Van J Health Sciences. 2020;13:54-61.

15. Satici B, Gocet-Tekin E, Deniz ME, et al. Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. Int J Ment Health Addict. 2020;1-9.

16. Gross JJ, John OP. Facets of emotional expressivity: Three self-report factors and their correlates. Pers Individ Dif. 1995;19:555-68.

17. Akın A. The validity and reliability of the Turkish version of the Berkeley Expressivity Scale. Procedia Soc Behav Sci. 2011;30:27-33.

18. Duman N. Universite ogrencilerinde COVID-19 korkusu ve belirsizlige tahammulsuzluk. J Soc Scien. 2020;4:426-37.

19. Bulca-Karadem F. Investigation of Psychiatric Variables Determining Fear of Covid-19 in Healthcare Professionals, Specialization Thesis in Medicine. 2020.

20. Gencer N. Fear of individuals with coronavirus (covid-19) in the pandemic process: an example of corum. J International Social Sciences Academy. 2020;4:1153-73.

21. Kaya C. An Investigation of the Relationships Between Social Well-Being and Emotional Expression in terms of Various Variables (Master's thesis, Sakarya University). 2013.

22. Celik E. Examination of the relationship between hopelessness and emotional expression levels of high school students. J Europ Education. 2015;5:1-10.

23. Cao W, Fang Z, Hou G, et al. The psychological impact of the COVID-19 epidemic on college students in China. Psychiatry Res. 2020;287:1-5.

24. Rodríguez-Hidalgo A J, Pantaleón Y, Dios I, et al. Fear of COVID-19, stress, and anxiety in university undergraduate students: a predictive model for depression. Front PsychoL. 2020;11:3043046.

25. Bakioglu F, Korkmaz O, Ercan H. Fear of COVID-19 and positivity: Mediating role of intolerance of uncertainty, depression, anxiety, and stress. Int J Ment Health Addict. 2020;1-14.

26. Guduk O, Guduk O, Vural A. Evaluation of the intolerance of uncertainty

of healthcare workers in the covid-19 global epidemic. Hacettepe J Health Administration. 2021;24:139-150.

27. Karasu F. As cases of coronavirus (COVID-19) increase, an intensive care nurse at the forefront of the epidemic: "heroes on the frontline". J intensive care nursing. 2020;24:11-4.

28. Hoyt M A, Wang A W T, Boggero I A, et al. Emotional approach coping in older adults as predictor of physical and mental health. Psychol Aging. 2020;35:591.

29. Duprez C, Christophe V, Rimé B, et al. Motives for the social sharing of an emotional experience. J Soc Pers Relat. 2015;32:757-87.

30. Westland G. Verbal and non-verbal communication in psychotherapy. WW Norton & Company. 2015:1:28-290.

31. jaundice: a systematic review and meta-analysis. Cancer Imaging. 2017;17:1-7.

32. Jo JH, Chung MJ, Park JY, et al. Best options for preoperative biliary drainage in patients with Klatskin tumors. Surg. Endosc. 2017;31:422-9.