



DO HUMOR STYLES OF PATIENTS AFFECT THEIR INTENSIVE CARE EXPERIENCES?

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Abstract: The study was conducted in order to examine the correlation between the humor styles of the patients and their intensive care experiences. This study was conducted in descriptive and correlational design. The population of the study consisted of the patients who were treated in the general surgery, neurosurgery, neurology, and organ transplantation intensive care units of a university hospital. Its sample consisted of 204 intensive care patients. The data were collected using the Personal Information Form prepared by the researchers, Humor Styles Questionnaire, and Intensive Care Experience Questionnaire. The descriptive statistics, independent samples t test, One Way ANOVA, post-hoc tests, Correlation analysis and Cronbach's Alpha reliability analysis test were used to assess the data. In the study, it was found that the intensive care patients mostly used the affiliative and aggressive humor style and they had a positive intensive care experience. Additionally, there were a positive significant weak correlation between the affiliative humor and the subscale of "satisfaction with care" of ICEQ and a negative significant weak correlation between the subscales of "frightening experiences" and "recall of experience". As a result of the study, it was observed that the patients using the affiliative humor style had less pessimistic experience, remembered the intensive care experiences less, and were satisfied with the care provided the intensive care unit.


Keywords: Humor style, Patient, Intensive care experience

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1. Introduction

Humor, which is a basic human need, may be defined as seeing the entertaining part of the events and situations instead of being serious all the time (Yue, 2014; Ford et al., 2014). Humor is an effective method, providing a different point of view in managing the challenging experiences of life and in problem-solving. In other words, humor functions as an instrument that decreases the emotional burden in the situations causing stress or emotional stress (Ashwort, 1999; Öz, 2010).

Humor and laughing has many physiological, social, and psychological benefits. Physiologically the muscle strain reduces during laughing by the contraction and relaxation of the muscles and the circulation accelerates, the heart rate and the blood pressure increases, the respiratory rate and depth increase and the immunoglobulin a level increases and strengthens the immune system and the pain endurance increases (Aydın, 2005). Socially; by acting as a bridge between the individuals, it helps to establish new relations or to make the friendships stronger, contributes to the resolution of the disputes, and provides satisfaction by improving the ingenuity and productivity. Psychologically, it helps to experience positive emotions by reducing stress, tension and their negative effects (Balick and Lee, 2006, Alan and

Tiryaki, 2016). Humor allows reducing the stressful emotions and establishing more intended positive emotions (Yue et al., 2014).

People, by his/her nature, come across many difficulties and obstacles that are required to be overcome. One of the difficulties in this process is the intensive care experience. The intensive care units are the care centers which are used to provide the maximum possible benefit to the individuals, whose lives are under threat, and in which there is a lot of life-saving technological equipment and an interdisciplinary team approach is compulsory. Even though having the patients survive with the intensive care support may be considered as a successful result especially in recent years, these patients are also exposed to negative emotional results during the period they stay in the intensive care unit (Demir et al., 2009).

Factors such as life under threat, unfamiliar environment, and people, limitation of movement, irregular sleeping pattern, being confined to bed, being without the family members and relatives, the feeling of dependency on the equipment or the intensive care unit, and not being informed enough on the disease, treatment and applications cause the psychological symptoms to occur (Kaçmaz, 2002). This intensive care experience affects the individual at various levels. It is known that patients



use various coping methods during this experience. However, in the literature review; no study evaluating the correlation between patients' humor styles and intensive care experiences was found. For this reason, the aim of this study was to examine the correlation between the humor styles of the intensive care patients and their intensive care experiences.

2. Material and Methods

The descriptive and correlational study was conducted in the general surgery, neurosurgery, neurology, and organ transplantation intensive care units of a university hospital located in the eastern Türkiye. The population of the study consisted of the adult patients who were followed up in the intensive care and were conscious. The sample of the study consisted of 204 intensive care patients with significance level of 0.05, confidence level of 0.95, and the power to represent the population of 0.95 as a result of the power analysis. The data of the study were collected between 01 March 2017 and 15 April 2017 by using the face-to-face interview technique performed by the researcher on Monday, Wednesday, and Friday every week. The data were collected using the Personal Information Form, Humor Styles Questionnaire, and Intensive Care Experience Questionnaire prepared by the researchers. The data were collected at the hours when the intensive care conditions and the patients were suitable and each interview lasted for 15 minutes.

2.1. The Participant Information Form

The Personal Information Form consisted of a total of 10 questions including the socio-demographic data and the intensive care experiences of the patients.

2.2. Humor Styles Questionnaire

It was developed by Martin et al., and adapted to Turkish by Yerlikaya (2003). The questionnaire was developed in order to assess the four different dimensions related to the individual differences in the use of humor. There are four subscales in the scale designed to assess the two adaptive (affiliative and self-enhancing) and the two maladaptive (aggressive and self-defeating) uses of humor. The items in the Humor Styles Questionnaire are answered in the range of "1-Strongly disagree and 7-Totally agree". The eleven items in the scale are scored reversely. High score obtained from the subscales indicate the frequency of use of the related humor style. For the subscales, the Cronbach's Alpha coefficients are 0.78 for self-enhancing humor, 0.74 for the affiliative humor, 0.69 for the aggressive humor, and 0.67 for the self-defeating humor (Yerlikaya, 2003). In this study, the Cronbach's Alpha coefficients of the subscales were 0.47 for the self-enhancing humor, 0.67 for the affiliative humor, 0.63 for the aggressive humor, and 0.75 for the self-defeating humor.

2.3. The Intensive Care Experience Questionnaire

The questionnaire was developed by Rattray et al. (2004) to assess the experiences of intensive care patients.

Demir et al. (2009) conducted its validity and reliability study and adapted it to the Turkish society. The Cronbach's alpha coefficient of the questionnaire consisting of a total of 19 items was determined as 0.79 (Demir et al., 2009). In this study, the Cronbach alpha coefficient of the questionnaire was found as 0.63. The questionnaire consists of four subscales. The first six items assess the "awareness of surroundings" situation (6-30 points); 7th-10th items assess the "Frightening experiences" (4-20 points); 11th-14th items assess the "Recall of experiences" (4-20 points); and 15th-19th items assess the "satisfaction with care" (5-25 points). While the lowest score to be taken from the scale is 19, the highest score is 95. The situation of the patients who get high scores from the scale is evaluated as the high awareness and more positive experiences (Demir et al., 2009).

2.4. Statistical Analysis

Descriptive statistics, independent samples t-test, One Way ANOVA, Kruskal Wallis, Correlation and Cronbach's Alpha reliability analysis were used to assess the data. The results were assessed at the confidence interval of 95% and significance level of $P < 0.05$.

3. Results

Table 1 shows the socio-demographic characteristics and the intensive care experience of the patients.

In the study, it was determined that the age averages of the patients were 50.8 ± 13.7 , 52.7% were males, 35% were high school graduates, 37.4% were housewives, the income of 57.6% was equal to their expense, 32.5% were followed up in the organ transplantation intensive care, their length of intensive care stay was approximately 4.97 ± 6.25 days, the patients stayed in the intensive care for 1.54 ± 1.03 times on the average, 38.9% felt fear in the intensive care process, and 31% felt bad.

Table 2 shows HSQ and ICEQ mean scores of the patients (Table 2). In the study, it was determined that the HSQ affiliative humor subscale mean score of the patients was 34.4 ± 5.8 , the ICEQ mean score was 64.2 ± 7.5 , and mean score of the subscale "awareness of surroundings" was 20.7 ± 3.1 .

Table 3 shows the comparison of HSQ and ICEQ mean scores according to the socio-demographic characteristics of the patients. In the study, it was observed that the difference between mean scores of the subscales "Awareness of surroundings" and "Recall of experience" was statistically significant ($P < 0.05$).

The difference between the mean scores of affiliative and aggressive humor subscales and the ICEQ, its subscales "Awareness of surroundings", "Recall of experience" and "the satisfaction with care" in terms of their educational level was found as statistically significant ($P < 0.05$). After the Bonferroni correction, it was observed that the difference resulted from the group with the educational status of university graduate and higher.

Table 1. The socio-demographic characteristics and the intensive care experience of the patients

The characteristics of the patient	Number (N)	%	X± SD
Age	203		50.8±13.7
Gender			
Female	96	47.3	
Male	107	52.7	
Educational level			
Illiterate	41	20.2	
Primary school	50	24.6	
High school	71	35.0	
University and higher	41	20.2	
Profession			
Civil servant	36	17.7	
Retired	26	12.8	
Employee	42	20.7	
Housewife	76	37.4	
Other	23	11.3	
Income status			
Income is less than expense	42	20.7	
Income is equal to expense	117	57.6	
Income is more than expense	44	21.7	
Intensive care			
Organ transplantation	66	32.5	
General Surgery	42	20.7	
Neurosurgery	57	28.1	
Neurology	38	18.7	
Height of intensive care stay			4.97±6.25
Number of intensive care stays			1.54±1.03
The feelings of the patients during the intensive care			
I am scared	79	38.9	
I felt pain	31	15.3	
I felt bad	63	31	
I did not feel bad	30	14.8	
TOTAL	203	100.0	

Table 2. HSQ and ICEQ mean scores of the patients

Scale	N	X ± SD
Humor Styles Questionnaire		
Affiliative Humor	203	34.4±5.8
Self-enhancing Humor	203	30.8±6.6
Aggressive Humor	203	31±6.5
Self-defeating Humor	203	29.9±7.6
The Intensive Care Experience Questionnaire (ICEQ)	203	64.2±7.5
F1 = Awareness of surroundings	203	20.7±3.1
F2 = Frightening experiences	203	14±2.7
F3 = Recall of experience	203	15.9±2.3
F4=Satisfaction with care	203	13.9±2.3

Table 3. Comparison of HSQ and ICEQ mean scores according to the socio-demographic characteristics of the patents

The characteristics of the patient	Affiliative Humor X±SD	Self-enhancing Humor X±SD	Aggressive Humor X±SD	Self-defeating Humor X±SD	ICEQ X±SD	F1 X±SD	F2 X±SD	F3 X±SD	F4 X±SD
Gender									
Female	34.6±6.4	30.4±6.8	31.6±6.9	30.7±7.7	64.3±6.1	21.2±2.9	13.7±2.1	15.5±2.02	13.8±2.3
Male	34.3±5.2	31.1±6.3	30.5±6	29.2±7.5	64.8±8.6	20.3±3.3	20.3±3.3	16.2±2.6	14±2.3
Statistical test and significance	t=0.289 P=0.773	t=-0.783 P=0.434	t=1.098 P=0.274	t=0.169 P=1.381	t=-0.466 P=0.642	t=2.007 P=0.046	t=-1.392 P=0.166	t=-2.010 P=0.046	t=-0.540 P=0.590
Educational Level									
Illiterate	33.3±7.9	30±9	28.6±10.8	28.1±9.2	61.4±8	20.1±3.1	13±2.4	15±2.3	13.1±2.4
Primary school	33.1±5.5	31.5±6.1	32.3±4.3	31.7±7.3	65.8±5.6	21.7±2.3	13.8±2	15.9±2.24	14.2±2.21
High school	34.8±4.5	30.7±5.9	30.8±4.1	30.2±6.8	64.7±8.7	19.9±3.7	14.5±3.6	16.3±2.6	13.8±2
University and higher	36.7±5.1	30.7±5.4	32.3±5.9	29.2±7.4	66.1±5.7	21.5±2.5	14.2±1.7	15.9±2.3	14.4±2.6
Statistical test and significance	F=3.548 P=0.015	F=0.361 P=0.781	F=3.164 P=0.026	F=1.787 P=0.151	F=3.638 P=0.014	F=4.694 P=0.003	F=2.598 P=0.053	F=2.935 P=0.035	F=2.662 P=0.049
Income status									
Income is less than expense	31.5±7.4	28.7±8.3	28.9±9.8	27±9	63.2±8.4	20.1±3.2	13.2±2.9	16.1±2.6	13.7±2.4
Income is equal to expense	35.4±5.2	31.6±5.8	31.6±5.5	30.6±7.1	64.5±7.7	20.8±3.2	13.8±2.4	15.8±2.4	14±2.2
Income is more than expense	34.7±4.8	30.4±6.2	31.4±4.2	30.8±7	66±5.7	21.2±2.7	15.1±3	15.9±2	13.7±2.3
Statistical test and significance	F=0.475 P=0.754	F=0.328 P=0.859	F=1.206 P=0.31	F=5.137 P=0.001	F=4.901 P=0.001	F=3.986 P=0.004	F=1.172 P=0.005	F=7.526 P=0.000	F=4.163 P=0.003

In the study, it was observed that the difference between the HSQ self-defeating subscale mean scores of the patients according to the income status was statistically significant ($P<0.05$). As a result of the post-hoc test, it was determined that the difference resulted from the group whose income was higher than expense. Similarly, it was found that the difference between the mean scores of the ICEQ*, F1*, F4*, F2* and F3** subscales in terms of income status of the patients was statistically significant (*= $P<0.05$, **= $P<0.001$).

After the Bonferroni correction, it was determined that

the difference was associated with the group whose income was higher than the expense for ICEQ, F1, F2, and F3, the difference was associated with the group whose income was equal to the expense for F4.

Table 4 shows the comparison of the intensive care characteristics of the patients regarding with their HSQ and ICEQ mean scores. In the study, no significant difference was observed between intensive care where the patients were followed and HSQ subscales and the ICEQ mean scores ($P>0.05$).

Table 4. The comparison of the intensive care characteristics of the patients with their HSQ and ICEQ mean scores

Intensive care	Affiliative Humor	Self-enhancing Humor	Aggressive Humor	Self-defeating Humor	ICEQ	F1	F2	F3	F4
Organ transplantation	33.9±6.2	29.9±6.5	30.5±7.5	28.1±7.6	63.8±9.7	20.6±3.5	13.6±3	16±2.8	13.6±2.7
General Surgery	34.6±7.6	30±8.1	30.4±6.9	28.5±9.1	66.8±6.1	20.7±2.9	14.9±2.7	16.5±2.2	14.5±1.8
Neurosurgeon	35.3±4.9	31.1±5.7	31.3±5.3	31.4±6.8	64.1±6.2	21±2.9	13.7±2.5	15.4±1.9	13.8±2.4
Neurology	33.8±3.8	31.8±6	32.2±5.7	32.5±6.1	64.3±6	20.6±3.2	14±2.7	15.6±2.2	13.8±1.6
Statistical test and significance	F=0.799 P=0.496	F=0.753 P=0.522	F=0.746 P=0.526	F=4.118 P=0.207	F=1.536 P=0.206	F=0.204 P=0.894	F=2.371 P=0.072	F=1.675 P=0.174	F=1.431 P=0.235
Patient's feelings in intensive care unit									
I am scared	35.1±4.5	30.5±5	31.9±5.4	30.4±7.03	65.4±6.6	21.6±2.5	16.1±2.1	16.1±2.1	13.9±2.4
I felt pain	35.1±4.8	28.1±5.2	30.4±5.6	26.6±5.3	64.6±9.9	19.6±3.7	15.8±2.6	15.8±2.6	13.7±2.5
I felt bad	33.4±7.5	30.8±8.3	29.3±8.6	29±8.8	63.3±8.2	20±3.3	15.7±2.2	15.7±2.2	13.8±2.2
I did not feel bad	34.2±5.5	34.2±6.1	33±3.3	34.1±6.8	64.9±4.5	21.2±3	15.7±2.9	14.1±1.8	14.1±1.8
Statistical test and significance	F=1.117 P=0.343	F=4.682 P=0.003	F=3.119 P=0.027	F=5.513 P=0.001	F=0.958 P=0.414	F=4.779 P=0.003	F=3.254 P=0.023	F=0.312 P=0.817	F=0.15 P=0.929

In the study, no significant difference was determined between the feelings of the patients in the intensive care and affiliative humor subscale mean scores*; whereas, a significant difference was determined between the feelings of the patients in the intensive care and the other subscale mean scores** (*= $P>0.05$, **= $P<0.01$). According to the post-hoc test result, it was observed that the difference was associated with the group who did not feel bad among all the groups. No significant difference was found between the feelings of the patients in the intensive care and ICEQ, F3 and F4 mean scores*; whereas, a significant difference was found between the F1 and F2 mean scores** (*= $P>0.05$, **= $P<0.01$).

After the Bonferroni correction, it was observed that the difference was associated with the group that stated "I

felt scared in the intensive care process".

Table 5 shows the examination of the correlation between the number of intensive care hospitalization and length of intensive care stay, and the HSQ and ICEQ mean scores. In the study, it was determined that the correlation between the number of intensive care hospitalization and the length of intensive care stay, and the HSQ and ICEQ subscale mean scores was not statistically significant ($P>0.05$).

Table 6 shows the examination of the correlation between the HSQ and ICEQ mean scores of the patients. In the study, a positive significant weak correlation between the Affiliative humor and ICEQ F4 subscale and a negative significant weak correlation between F2** and F3* subscales were determined (*= $P>0.05$, **= $P<0.01$).

Table 5. The examination of the correlation between the number of intensive care hospitalization and length of intensive care stay of the patients, and HSQ and ICEQ mean scores

	Affiliative Humor	Self-enhancing Humor	Aggressive Humor	Self-defeating Humor	ICEQ	F1	F2	F3	F4
Number of intensive care stay	r=0.037 P=0.603	r=0.103 P=0.142	r=0.016 P=0.825	r=0.109 P=0.12	r=0.017 P=0.814	r=0.12 P=0.862	r=-0.043 P=0.539	r=-0.008 P=0.906	r=0.097 P=0.167
Length of intensive care stay	r=0.048 P=0.496	r=-0.073 P=0.299	r=0.000 P=0.999	r=-0.051 P=0.469	r=0.012 P=0.87	r=0.117 P=0.096	r=-0.026 P=0.714	r=-0.055 P=0.432	r=-0.035 P=0.621

Table 6. The examination of the correlation between the HSQ and ICEQ mean scores of the patients

	ICEQ	F1	F2	F3	F4
Affiliative Humor	r = 0.116 P=0.099	r=0.016 P=0.826	r=-0.295 P=0.000	r=-0.152 P=0.030	r=0.16 P=0.022
Self-enhancing Humor	r=0.096 P=0.172	r=0.037 P=0.598	r=0.09 P=0.202	r=0.066 P=0.351	r=0.086 P=0.224
Aggressive Humor	r=0.003 P=0.967	r=0.1 P=0.154	r=-0.058 P=0.409	r=0.018 P=0.794	r=-0.077 P=0.274
Self-defeating Humor	r=-0.004 P=0.953	r=0.079 P=0.26	r=-0.042 P=0.554	r=-0.135 P=0.054	r=0.067 P=0.344

4. Discussion

Humor strengthens the coping skills of the individual by supporting the physical, emotional, social and cognitive development and increases his/her problem solving skills (Hurren, 2006). Previous studies has shown that humor reduces stress (Yalçın and Aştı, 2011; Traş et al., 2011). The intensive care may be an emotionally unsettling environment for the patients and their relatives and it is a process in which the patients and their relatives may also experience psychological problems at different levels (Toraman, 2000). The results of this study conducted to examine the correlation between the humor styles of the patients and their intensive care experiences were discussed with the literature.

In the study, it was determined that the intensive care patients used the affiliative and aggressive humor style more than the other humor styles. As there is no study examining the humor style of the patients in the

literature, it is thought that the humor styles of the patients are related to their personal characteristics. In the study, it was determined that the patients had positive intensive care experience. While it has been reported in the literature that the experiences of the intensive care patients are generally negative, there are studies in parallel with the result of the present study (Hindistan et al., 2009; Özdemir, 2010; Adsay and Dedeli, 2015). The positive experiences in the intensive care are generally related to the positive characteristics of the nursing care and the nurses (Granja et al., 2005).

In the study, no significant difference was found between the humor styles of the women and men ($p>0.05$)(Table 3). Also in the study conducted by Otrar and Findıklı with the school managers, similarly, no significant difference was found between the humor styles in terms of the gender (Otrar and Findıklı, 2014). While there was no significant difference between the ICEQ, F2 and F4 subscale mean scores in terms of the genders of the

patients ($P>0.05$), it was observed that the difference between the F1 and F3 subscale mean scores was statistically significant ($P<0.05$) (Table 3). In parallel with this study, in the study by Akdemir (2013) entitled "Determining the intensive care experiences of the patients and the effective factors", no significant difference was found between the ICEQ, F2 and F4 mean scores of the female and male patients. In the study by Adsay and Dedeli (2015), the mean scores of the female patients from the F1 subscale were found to be higher than the mean scores of the male patients. Similarly, in the study by Karadağ (2013), it was determined that the difference between the scores of the patients in the F3 subscale in terms of the gender was statistically significant. The study supports the studies by Adsay and Dedeli (2015), and by Karadağ (2013).

A significant difference was found between the groups in the HSQ affiliative humor and aggressive humor subscales between the groups in terms of the educational status in the study ($P<0.05$); whereas, no significant difference was found in the subscales of self-enhancing humor and self-defeating humor ($P>0.05$) (Table 3). In the study by Akdur and Batıgün (2014), it was stated that the use of affiliative humor by the participants increased as educational level of their mothers increased and the use of aggressive humor increased as their fathers' educational level increased. In Erözkan's (2009) study, it was found that despite being in a different context from the study, the change at the class level did not affect the humor style. The results support Akdur and Batıgün (2014) results in terms of affiliative humor and aggressive humor and support Erözkan's (2009) results in terms of self-enhancing humor and self-defeating humor.

As the educational level increased, the patients were expected to use the coping methods more effectively (Özer et al., 2009). Humor has an important place among these coping methods (Öz, 2010). In the study, a significant difference was found between the groups in all the subscales except for the ICEQ and F2 subscales in terms of educational level ($P<0.05$) (Table 3). Although there are studies stating that educational level affected the intensive care experience supporting the study in the literature, there are also studies stating that the educational level did not affect the intensive care experience (Akdemir, 2013; Tuna et al., 2014; Adsay and Dedeli, 2015).

In the study, any significant difference was not determined ($P>0.05$) between the income status and the scores from the humor styles subscales except for the self-defeating humor style ($P<0.05$). In parallel with the study, also in the Erözkan's (2009) study, no significant difference was found between the groups in terms of the socio-economic levels related to the humor styles. The result of the present study supports the result of Erözkan (2009).

It is known that the patients and their relatives with low income level have difficulties in fulfilling the medical or

personal needs of the intensive care patients. In the study, a significant correlation was determined between the ICEQ and all the subscales in terms of the income status ($p<0.05$). In their study, Yaya and Koyuncu (2006) shared the experiences of the patients, examined the reason for the noncompliance of the patients to the treatment, and determined that "he/she would not pay the hospital charge, her husband/his wife cannot receive his/her salary for three months and he/she wants to leave the hospital for these reasons". In this context, the results of the present study support the literature.

In the study, no significant difference was found between intensive care where the patients were followed and scale mean scores ($P>0.05$). Humor is a mechanism that affects the efficiency directly when it is used in various living spaces (Kuğuoğlu and Demirbağ, 2015). As the intensive care environments are similar to each other in general lines and the humor styles of the patients did not change in such a short time, it was thought that the difference was not significant. In parallel with this study, in the study by Adsay and Dedeli (2015), no significant difference was found between the intensive care where the patients were followed and the intensive care experience. The result of the study supports Adsay and Dedeli (2015).

In the study, it was observed that the patients, who did not feel themselves bad in the intensive care process, used self-enhancing, aggressive, self-defeating humor styles more and the awareness of surroundings and their frightening experiences mean scores of the patients who felt scared in this process were significantly high ($P<0.05$). The fact that humor reduces stress, develops the feeling of confidence and is effective in the conditions like coping with fear are included in the literature (Kuğuoğlu and Demirbağ, 2015). In this context, it can be asserted that the patients who used humor in intensive care process did not feel bad. In the study by Wong and Arthur on the feelings of the intensive care patients, it was found that the patients experienced anxiety and the fear of the unknown (Wong and Arthur, 2000). The patients stated the negative experiences as fear, anxiety, pain or discomfort, sleeplessness, and cognitive disorder and the positive experiences as security, being in a safe environment and the feeling of trust provided by the nurses (Stein and McKinley, 2009). The results of the study are compatible with the literature.

In the study, no significant correlation was determined between the number of intensive care hospitalization and the length of intensive care stay, and the HSQ, ICEQ and its subscales ($P>0.05$) Parallel to the study, it was found in Akdemir's (2013) study that the number of intensive care hospitalization did not affect the intensive care experience. Also in the study by Özdemir (2010) to examine the experiences of the patients in the coronary intensive care, no significant correlation was determined between the length of intensive care stay and the intensive care experience. According to the study by Özdemir (2010) and Maddox et al. (2001) the patients

considered the period they stayed in the intensive care as the recovery process and did not perceive this situation negatively. Also, the most important issue, the patients have focused on, was the physical healing process.

In the study, a negative significant weak correlation was determined between the affiliative humor styles of the patients and the ICEQ frightening experiences* and recall of experiences** subscales; whereas, a positive significant weak correlation was determined between the humor styles of the patients and the ICEQ satisfaction with care subscale (*= $P<0.05$, **= $P<0.01$). In the literature, no study was found examining the humor styles of the patients and the intensive care experiences. It was determined that the patients using the affiliative humor had less frightening experiences in the intensive care, remembered their experiences less, and were satisfied with the care in the ICU. In the study by Svebak et al. (2004) to examine the concrete correlation between humor and health, it was found that humor increased the health and symptom perception, the skills to cope with the diseases and the tendency to seek for health care service. Additionally, the individuals using the affiliative humor can improve their relations by using respectful interactions both for themselves and the others. They can make jokes by keeping the self-acceptance feelings and tell something funny about themselves (Martin et al., 2003.) From this point of view, it may be asserted that the patients using the affiliative humor in the intensive care had stronger coping mechanisms, less stress, and more positive experiences.

5. Conclusion

As a result of the study, it was found that the intensive care patients mostly used the affiliative and aggressive humor styles and they had a positive intensive care experience. Also, it was observed that the patients using the affiliative humor style experienced less frightening experience, remembered the intensive care experiences less, and were satisfied with the care provided the intensive care unit.

In accordance with these results, it is recommended that especially the nurses evaluate not only what kind of care or treatment the intensive care patients receive but also how this process affects the patients, that the humor style of the patients are determined and the patients are encouraged to use the positive humor styles, that the nurses question their own humor styles and they are informed on the positive humor styles and the effects of these on the recovery process and also that the study is repeated in the larger and different groups.

The nurses evaluate not only what kind of care or treatment the intensive care patients receive but also how this process affects the patients, that the humor style of the patients are determined and the patients are encouraged to use the positive humor styles.

Limitations

The limitations of the study are that the study was conducted only in one institution and the patients were selected by the improbable random sampling method.

Author Contributions

Concept: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Design: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Supervision: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Data collection and/or processing: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Data analysis and/or interpretation: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Literature search: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Writing: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Critical review: S.Ç.A. (34%), S.S. (33%) and S.T. (33%), Submission and revision S.Ç.A. (34%), S.S. (33%) and S.T. (33%). All authors reviewed and approved final version of the manuscript.

Conflict of Interest

The authors declared that there is no conflict of interest.

Ethical Approval/Informed Consent

Research was conducted in line with the Declaration of Helsinki. Before starting the study, written permission was received from the İnönü University Health Sciences Scientific Research and Publication Ethics Committee (Decision No: 2018/5-17) and Head Physician of Turgut Özal Medical Center.

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References

- Adsay E, Dedeli Ö. 2015. Yoğun bakım ünitesinden taburcu olan hastaların yoğun bakım deneyimlerinin değerlendirilmesi. *Turkish J Medic Surg Inten Care Medic*, 6: 90-97.
- Akdemir N. 2013. Hastaların yoğun bakım deneyimleri ve etkileyen faktörlerin belirlenmesi. Master Thesis, Gazi University, Ankara, Türkiye, pp: 169.
- Akdur S, Batıgün AD. 2017. Kişilik özellikleri ile psikolojik belirtiler arasındaki ilişkide kişilerarası ilişki tarzları ve mizah tarzlarının aracı rolü. *Türk Psikol Yaz*, 20: 1-10.
- Alan H, Tiryaki ŞH. 2016. Yöneticilerin kördüğümü: *Mizah. J Psych Nurs*, 7:152-156.
- Ashworth P. 1999. Humour-a critical faculty in critical care nursing? *Inten Critical Care Nurs*, 15: 245.
- Aydın A. 2005. Nurse and humor. *CÜ Hemş Yüksekokulu Derg*, 9: 1-5.
- Balick PM, Lee CA. 2006. Humor and laughter may influence health. 1. History and background. *Evid Based Comp Alternat Med*, 3: 61-63.
- Demir Y, Akın E, Eşer İ, Khorshid L. 2009. Yoğun bakım deneyim ölçeği'nin geçerlik ve güvenilirlik çalışması. *Türkiye Klin Hemş Bil*, 1: 1-11.
- Erözkan A. 2009. Üniversite öğrencilerinin kişiler arası ilişki tarzları ve mizah tarzları. *Dokuz Eylül Üniv Buca Eğitim Fak Derg*, 26: 56-66.
- Ford TH, McCreight KA, Richardson K. 2014. Affective style,

- humor styles and happiness. *Europe's J Psychol*, 10: 451-463.
- Granja C, Lopez A, Moreira S, Dias C, Costa-Pereira A, Carneiro A. 2005. Patient's recollections of experiences in the intensive care unit may effect their quality of life. *Crit Care*, 9: 96-109.
- Hintistan S, Nural N, Öztürk H. 2009. Yoğun bakım ünitesinde yatan hastaların deneyimleri. *Yoğun Bakım Hemş Derg*, 13: 40-46.
- Hofhuis JGM, Spronk PE, Van-Stel HF, Schrijvers JP, Rommes JH, Bakker J. 2008. Experiences of critically ill patients in the ICU. *Inten Critical Care Nurs*, 24: 300-313.
- Hurren BL. 2006. The effects of principals' humor on teacher's job satisfaction. *Educ Stud*, 32: 373-385.
- Kaçmaz N. 2002. Yoğun bakım hastalarının psikolojik sorunları ve hemşirelik yaklaşımları. *Yoğun Bakım Hemş Derg*, 76: 75-81.
- Karadağ S. 2013. Koroner arter hastalığı olan bireylerin hastalık algısının ameliyat sonrası yoğun bakım deneyimine etkisi. Master Thesis, Ege University, İzmir, Türkiye, pp: 130.
- Maddox M, Dunn SV, Prey LE. 2001. Psychosocial recovery following ICU: Experiences and influences upon discharge to the community. *Inten Critical Care Nurs*, 17: 6-15.
- Martin RA, Puhlik-Doris P, Larsen G, Gray JJ, Weir K. 2003. Individual differences of uses of humor and their relation to psychological well-being: development of the humor styles questionnaire. *J Res Personal*, 37: 48-75.
- Otrar M, Fındıklı EB. 2014. Okul yöneticilerinin mizah tarzları ile yaşam doyumları arasındaki ilişkinin incelenmesi (Ataşehir örneği). *Eğitim Bil Derg*, 39: 145-157.
- Öz F. 2010. An important way for coping: usage of humor. *Anadolu Hemş Sağlık Bil Derg*, 13: 83-88.
- Özdemir L. 2010. Koroner yoğun bakımda kalan hastaların deneyimlerinin belirlenmesi. *Turkish J Res Devel Nurs*, 12: 5-12.
- Özer ZC, Şenuzun F, Tokem Y. 2009. Miyokart enfarktüsülü hastalarda anksiyete ve depresyonun incelenmesi. *Türk Kardiyol Der Arş*, 37: 557-562.
- Özkan HA. 2015. Mizahın aile üzerine etkisi, İçinde: Kuşuoğlu S, Demirbağ BC. *Aile Temelli sağlık yaklaşımı*, 1. Ed, Akademisyen Kitabevi, Ankara, Türkiye, pp: 438.
- Rattray J, Johnston M, Wildsmith JAW. 2004. The intensive care experience: Development of the ICE questionnaire. *J Adv Nurs*, 47: 64-73.
- Stein-Parbury J, McKinley S. 2009. Patient's experiences of being in an intensive care unit: a select literature review. *Am J Crit Care*, 9: 20-27.
- Svebak S, Martin RA, Holmen J. 2004. The prevalence of sense of humor in a large unselected country population in Norway: relations with age, sex and some health indicators. *Humor*, 17: 121.
- Toraman F, Karabulut EH, Alhan C. 2000. Fast track recovery uygulanan hastalarda yoğun bakımda kalış süresine etki eden parametreler. *TGKDCCD*, 8: 605-609.
- Taş Z, Arslan C, Taş AM. 2011. Analysis of humor styles, problem solving and self-esteem of prospective teachers. *J Human Sci*, 8: 716-732.
- Tuna A, Bektaş M, Orhan F, Ayran G, Çelik GO. 2014. Koroner yoğun bakımda hasta deneyimleri. *Anatolian J Clin Invest*, 8(2): 77-81.
- Wong FYK, Arthur DG. 2000. Hong Kong patients' experiences of intensive care after surgery: nurses' and patients' views. *Inten Critical Care Nurs*, 16: 290-303.
- Yalçın N, Aştı T. 2011. Hemşire-hasta etkileşimi. *Florence Nightingale Hemş Derg*, 19: 54-59.
- Yava A, Koyuncu A. 2006. Entübe hastalar ile iletişim deneyimlerimiz: olgu sunumları. *Gülhane Tıp Derg*, 48: 175-179.
- Yerlikaya EE. 2003. Mizah tarzları ölçeği'nin (The humor styles questionnaire) uyarlama çalışması. Master Thesis, Çukurova University, Sosyal Sciece Institute, Adana, Türkiye, pp: 91.
- Yue XD, Wing-Yin K, Jiang F, Hiranandani NA. 2014. Humor styles, self-esteem and subjective happiness psychological reports. *Mental Physical Health*, 115: 517-525.