

Healthcare professional's coating with uncertainty and humor during pandemic

Emine Cansu Çevik¹, Nur Elçin Badırgalı^{2*}

¹Department of Nurse, Antalya City Hospital, Antalya, Türkiye

²Department of Gerontology, Faculty of Health Sciences, İstanbul University-Cerrahpaşa, İstanbul, Türkiye

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ABSTRACT

Aims: The aim of the current research is to determine the situations of health workers and to reveal that humor can be used as an effective coping method.

Methods: The study is in the descriptive-correlational design type and includes 415 individuals who filled out the online questionnaires between March and April 2021. Data were collected from the participants, through the Personal Data Form, the Intolerance of Uncertainty Scale and the Scale of Coping with Humor in the Workplace.

Results: The mean age of the participants was 31.84±7.82 years, 76.6% were women, and 64.1% were working in units with patients diagnosed with pandemic. Healthcare professionals' total scores of intolerance to ambiguity and coping with humor in the workplace were 36.73±10.11 (moderate) and 57.85±18.62 (low to moderate), respectively.

Conclusion: Many factors were analyzed with intolerance to uncertainty, but no significant relationship was found. However, when uncertainty prevails, it is seen that healthcare professionals use more humor to cope with; situations that may be more traumatic for them (when they are diagnosed with pandemic and have a relative who died due to the pandemic); It was determined that they could not use humor as a coping method. A low level of statistically significant correlation was found between the total score of the participants' intolerance to uncertainty scale and their scores for coping with humor at work.

Keywords: Adaptation, delivery of health care, pandemics, uncertainty, workplace

INTRODUCTION

Pandemic spread across many countries with Asian countries being the initial ones and turned into an international health issue that affected the whole world. Pandemic disrupted the global daily life, resulting in profound changes in individuals' lives. This has brought along mental health problems as well (Lai et al., 2020).

The pandemic is literally a mass of uncertainty due to many reasons like its high rate of spread, high death rates, uncertainty as to its causes, lack of a known treatment method and asymptomatic course of the disease during the infection process (Pan et al., 2020). This has made the healthcare professionals, who combat the pandemic at the front lines, the most vulnerable occupational group in the pandemic (Di Tella et al., 2020). Studies in literature show that levels of anxiety and fear (Pan et al., 2020), depression, sleeplessness, post-trauma stress (Lai et al., 2020) for healthcare professionals have reached alarming levels during the pandemic. One of the topics researched related to the pandemic in recent years has been 'tolerance of uncertainty'. Tolerance of uncertainty is defined as tendency to demonstrate negative emotional, cognitive and behavioral reactions in the face of events and situations containing uncertainty (Duman, 2020). The notion of tolerance of uncertainty was initially discussed as part of

the common anxiety disorder. During the pandemic; the notions of anxiety, fear and uncertainty have been related with each other in many different ways. During the pandemic, triggering of one of these has been enough to result in mental health problems (Pan et al., 2020-Duman, 2020).

Studies in literature have shown that the pandemic was mentally challenging for healthcare professionals (Pan et al., 2020-Canestrari et al., 2021). Humor, which an area of research for positive psychology plays an important role in overcoming these challenges. Simply, humor is an element of comedy like wit, entertainment and irony. It is about having a fun attitude towards life and its defects. Thanks to humor, it is possible for one to have a more objective attitude towards experiences and others' behavior (Almeida & Nunes, 2020-Savitsky et al., 2020). Humor facilitates interpersonal communication and reconciliation between individuals in cases of conflict. Humor affects work relations in a positive way, helps employees cope with stress and solve problems (Kim & Plester, 2019).

Studies conducted during the pandemic period often focus on the anxiety and depression experienced by individuals (Tükel, 2020-Çubuk, 2020). There are a limited number of studies that address intolerance to uncertainty. In these studies, the sample

*Corresponding Author: Nur Elçin Badırgalı, nurelcin.boycioglu@iuc.edu.tr



group usually consists of students (Duman, 2020, Sarkisian & Grestel., 2016), healthy individuals from the community (Bakioğlu et al., 2021, Güöüşoğlu & Aşçı.,2020, Şar et al., 2012), and individuals with a diagnosis of any disease (Gümüş & Sezgin, 2016, Cengiz, 2019, Şen & Yıldızhan, 2020). There are also a limited number of studies that address workplace coping methods through humor. The sample group consists of teachers (Recepöğlu, 2008), managers (Büyükyılmaz,2018-Çetinkaya & Şener, 2016), and students (Alan & Oran, 2019). In line with these data, the aim of this study is to examine the levels of intolerance to uncertainty, psychological distress, and workplace coping methods through humor among healthcare professionals who continued to work despite all the negative conditions, and to fill the gap in the literature.

METHODS

Ethics

This study was conducted with the approval of the Ethics Committee of Istanbul Okan University (Date: 10.032021, Decision No: 134). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki. (Participants were informed that they could leave the study at any time and that all information will remain confidential and will be used only for the purposes of this study). Since the data were collected online, participants were asked to confirm their voluntary participation before completing the survey.

Study Type: Study design is descriptive-correlational.

Sample: Data was collected between 30 March-30 April 2021. Inclusion criteria: being a healthcare professional between the ages of 18-60 with internet access. Study population comprised all healthcare professionals in Türkiye. However due to unfavorable research conditions due to the pandemic, study population is limited to participants who could be reached via online means.

Population size was calculated using the unknown sample method and determined as 384 participants ($n=(10.5)^{0.5}*(1.96/0.05)^{2/1+0.5}$ $n=384$). Also taking into account possible data loss, a total of 482 participants were contacted. Security personnel, director assistants and janitors were excluded and the study was completed with 415 participants. Convenience sampling was chosen as the sample selection method for the study.

Data collection tools: Data were collected using the Personal Information Form, Tolerance of Uncertainty Scale and Coping Humor Scale.

Personal information form: This form comprises 12 questions about demographic information (such as age, gender, marital status, occupation etc.) as well as about pandemic impact levels (such as pandemic infection history, having a family member lost due to pandemic, having a patient lost due to pandemic).

Tolerance of Uncertainty Scale (TUS-12): The Tolerance of Uncertainty Scale-12 short form developed by Carleton, Norton and Asmundson in 2007 was adapted to Turkish language by Sariçam, Erguvan, Akın and Akça in 2014 and have passed validity and reliability tests. The scale comprises 12 items. The form is a 5-Likert type scale and items can be

rated between 1-5 (1-Totally Disagree...5-Totally Agree). The scale also has two sub-scales. The first seven questions make up the "future anxiety" dimension while other questions make up the "preventive anxiety" dimension. Only the first item is reverse coded. A score between 12 and 60 can be obtained from the score. Higher scores obtained from the scale indicate higher intolerance for uncertainty. Cronbach alpha internal consistency reliability coefficient of the scale is 0,88 for the whole scale and 0,84 for the future anxiety sub-scale and 0,77 for the preventive anxiety sub-scale. The above-mentioned Cronbach alpha coefficients for the current study was calculated to be 0,93, 0,88 and 0,90.

Coping Humor Scale (CHS): To measure level of coping via humor at the workplace, the CHS scale developed by Doosje et. al. was used. This 23-item scale has four sub-scales namely; primary-focused coping (9 items), reaction-focused coping (4 items), instrumental aggressive/manipulative coping (7 items) and instrumental socializing coping (3 items). The items in the scale are rated using a 5-step scale that range from 1 (Never) and 5 (Very Often). A high score obtained from the scale indicates a high level of coping via humor at the work place. In the literature studies that research methods for coping via humor at the workplace are evaluated based on total score. Thus, in the current study as well, the data was evaluated based on total score. According to findings by Doosje et. al., Cronbach alpha internal consistency coefficient varies between 0,73 and 0,82 and was found to be 0,96 in the current study.

Procedure: After obtaining the approval of the ethics board, the questionnaire was transferred to electronic environment and shared with the participants via their social media accounts (Facebook, twitter and Instagram etc.). At the start of the survey, the purpose of the study was explained to the participants and participants that consented were included in the study.

The questionnaire link were shared with the participants via their social media accounts (Facebook, twitter and Instagram etc.) and participants were invited to participate. Individuals conducting the study were healthcare professionals and questionnaire link was shared via authors' friends to reach the participants as well.

Statistical Analysis

Data collected were analyzed using SPSS for Windows 21 (Statistical Package for Social science for Windows, Version 21.0) software. Demographic and descriptive data were indicated using average standard deviation, median IQR, numbers (n) and percentages (%). For normally distributed data differences between average scores were evaluated using Student t test and One-Way ANOVA test. For advanced statistical analysis, Tukey test was used. For correlation analysis, Pearson Correlation Analysis was utilized. For data not distributed normally, Kruskal-Wallis test was used. All findings were evaluated using a confidence interval of 95% and $p<0.05$ significance level.

RESULTS

An analysis of the demographics of the participants showed that average age was 31.84 ± 7.82 years, 76.6% were women, 51.6% were single, 58.8% were university graduates and 68.7%

were nurses and midwives. 64.1% of the participants worked in units with patients who were confirmed pandemic cases and 68% had patients who passed away due to pandemic, 30.4% indicated they had pandemic infection and 32.3% indicated they had a family member who passed away due to pandemic (Table 1).

Table 1. Participants' socio-demographic and the pandemic-related qualities

Qualities		n	%
Age		31.84±7.82 (18-60)	
Employment duration/month		112.05±97.86 (5-444)	
Gender	Female	318	76.6
	Male	97	23.4
Marital status	Single	214	51.6
	Married	201	48.4
Education	High school	17	4.1
	Associate degree	55	13.3
	Undergraduate degree	244	58.8
	Graduate degree	99	23.8
Occupation	Nurse and midwife	285	68.7
	Physician	54	13
	Technician (anesthesiologist, radiology or laboratory technician)	33	8
	Other (physiotherapist, pharmacist, dentist, dietician, biologist)	43	10.4
Institution	Public hospital	284	68.4
	University hospital	92	22.2
	Private hospital	39	9.4
Unit	Services	138	33.3
	Special unit (intensive care, surgery room, emergency, dialysis)	199	48
	Other (polyclinic, family health center, laboratory, screening centers)	78	18.8
Employment at a pandemic unit	Yes	266	64.1
	No	149	35.9
Have lost a patient due to the pandemic	Yes	282	68
	No	133	32
Have had pandemic infection	Yes	126	30.4
	No	289	69.6
Have lost a relative due to the pandemic	Yes	134	32.3
	No	281	67.7

In the current study, no correlation was found between participants' demographics and their qualities related to pandemic and the TUS-12 Scale (Table 2 and Table 3). A statistically significant correlation favoring singles was found between the marital status of the participants and their CHS scores (p=0.05). A statistically significant correlation was found between the occupations of the participants and their average CHS scores (p=0.044). CHS score averages of the technician occupational group were found to be lower than those of the physician and nurse/midwife occupational group. A statistically significant correlation was found between the institutions where the participants worked and their CHS scores (p=0.02). As a result of the advanced analyses, it was found that this correlation was between participants from university hospitals and those from private hospitals

(p=0.017). CHS score averages of those participants working at university hospitals were higher than averages of those working at private hospitals (Table 2).

A statistically significant correlation that favored participants working at pandemic units was found between employment at pandemic units and CHS scores (p=0.01). CHS scores of healthcare professionals who had patients that passed away due to pandemic had higher scores (Table 3). A low statistically significant correlation was found between the tolerance of uncertainty total scores and level of coping via humor at the work place scores (p=0.005; r=0.136). (Table 4).

DISCUSSION

The pandemic was challenging for many healthcare professionals. Thus, psycho-social problems experienced by healthcare professionals in relation to the pandemic should be unveiled necessary measures should be taken to cope with the associated problems (Cenestrari et al., 2021).

Tolerance of Uncertainty and Related Factors

Total TUS-12 scores of the healthcare participants in this study were 36.73±10.11 (min=14±10.11, max=60±10.11) and was found to be moderate. In the literature there are numerous studies that employed TUS-12 scale and TUS-12 total scores vary between 28 and 55 (Sarıçam et al., 2014, Geçgin & Sahranç, 2017). Some of these studies were conducted with university students and TUS-12 total score was found to be 38.79±8.81 (Duman, 2020), 29.7±9.5 in adults in USA (Şar et al., 2012), 28.44±10.03 in adults in Canada and USA (Cengiz, 2019) and 64.06±30.61 in patients (Gümüş & Sezgin, 2016). Thus, it is possible to argue that the TUS-12 score obtained in this study parallels those found in other studies in literature.

In the current study, a negative correlation with statistical significance was found between the ages of the participants and their TUS-12 scores. Accordingly, higher the participant's age lower his/her TUS-12 score would be. In literature, there are studies that failed to detect a correlation between age and tolerance of uncertainty as well as studies that detected a correlation between age and tolerance of uncertainty in healthcare professionals (Bongelli et al., 2021) and public servants (Angehrn et al., 2020) including healthcare professionals (Güdük et al., 2021). In one study conducted with nurses, over one fourth of the nurses indicated that their own lack of experience increased their work stress (Mert, 2018). Both the current study and the study mentioned above made the authors conclude that increased level of experience as a result of increasing age also resulted in lower levels of work stress, thus resulting in lower intolerance of uncertainty.

In the current study, no statistically significant correlation was found between gender, number of years worked, marital status, education, occupation type, institution, medical unit, the pandemic experience and TUS-12 average scores. This finding made authors believe that participants' character traits could be related to TUS-12 rather than demographic factors and pandemic's qualities.

Coping via Humor at the Workplace and Related Factors

Total scores obtained by the healthcare professionals in this study, from the coping via humor at the workplace

Table 2. Comparison of participants' socio-demographic qualities and Coping via Humor at Workplace Scale scores

Qualities		TUS-FA X±SD	TUS-PA X±SD	TUS-total X±SD	CHS total X±SD
Gender	Female	22.62±5.91	14.38±4.94	37±10.11	57.22±18.87
	Male	22.38±6.11	13.45±4.76	35.8±10.12	59.86±17.79
Statistical analysis	t	0.35	1.65	1.01	-1.23
	p	0.727	0.101	0.318	0.222
Marital status	Single	22.28±6.08	13.92±5.1	36.21±10.38	59.57±18.21
	Married	22.87±5.81	14.42±4.69	37.29±9.82	55.99±18.94
Statistical analysis	t	-1.01	-1.03	-1.10	1.97
	p	0.314	0.307	0.276	0.050
Education	High school	23(19-26)	18(12-22)	39(31-46)	55(45-67)
	Associate degree	16(19-25)	13(11.5-16)	33(28-40.5)	48(41-61.5)
	Undergraduate	19(23-27)	14.5(11-18)	37(29-45)	56(46-70)
	Graduate	23(18-27)	14(10-18)	38(27.5-44.5)	60(42-76)
Statistical analysis	K-W	7.549	4.520	4.638	5.202
	p	0.056	0.211	0.200	0.158
Occupation	Nurse/midwife	22.64±5.95	14.11±4.87	36.76±10.09	58.16±17.92
	Physician	22.12±5.36	13.33±4.72	35.46±9.12	60.38±19.28
	Technician	22.15±6.51	15.06±4.7	37.21±10.55	49.39±17.79
	Other	22.88±6.38	14.86±5.47	37.74±11.29	59.06±21.61
Statistical analysis	F*	0.208	1.179	0.451	2.726
	p	0.891	0.317	0.717	0.044
Institution	Public hospital	22.63±6.15	14.33±4.78	36.97±10.19	57.5±18.64
	University hospital	22.68±5.51	13.56±5.04	36.25±9.95	61.47±19.27
	Private hospital	21.76±5.56	14.38±4.57	36.15±10.15	51.71±15.3
Statistical analysis	F*	0.386	0.894	0.247	3.959
	p	0.680	0.410	0.781	0.020
Unit	Services	23.26±5.89	14.91±5.08	38.17±10.34	59.28±18.64
	Special unit	22.17±6.09	13.77±4.7	35.94±9.91	58.09±17.89
	Other	22.56±5.95	14.16±4.91	39.73±10.11	57.84±18.63
Statistical analysis	F*	1.433	2.397	2.118	1.599
	p	0.240	0.092	0.122	0.203

t: Student t test, F* One Way ANOVA test (Post Hoc: Tukey Test) K-W: Kruskal-Wallis Test. **Data is shown using median (IQR). TUS-FA: Tolerance of Uncertainty Scale-Future Anxiety, TUS-PA: Tolerance of Uncertainty Scale-Preventive Anxiety, TUS-Total: Tolerance of Uncertainty Scale Total Score, SD: Standard deviation

Table 3. Comparison of participants' experiences during the pandemic and their tolerance of uncertainty and coping via humor at workplace scores

Qualities		TUS-FA X±SD	TUS-PA X±SD	TUS-total X±SD	CHS total X±SD
Employment at a pandemic unit	Yes	22.52±6.19	13.88±4.9	36.4±10.3	60.18±19.75
	No	22.64±5.53	14.67±4.9	37.31±9.79	53.65±15.66
Statistical analysis	t	-0.12	-1.57	-0.88	3.48
	p	0.842	0.119	0.382	0.001
Have had pandemic infection	Yes	22.71±6.22	14.69±5.16	37.41±10.81	59.48±18.15
	No	22.5±5.84	13.93±4.78	36.43±9.8	57.12±18.82
Statistical analysis	t	0.35	1.46	0.91	1.19
	p	0.709	0.147	0.368	0.236
Have lost a patient due to the pandemic	Yes	22.64±5.92	14.2±4.83	36.84±9.88	59.8±19.29
	No	22.4±6.03	14.09±5.08	36.5±10.62	53.66±16.45
Statistical Analysis	t	0.38	0.21	0.32	3.17
	p	0.707	0.840	0.750	0.002
Have lost a relative due to the pandemic	Yes	22.43±5.67	13.87±4.67	36.3±9.45	58.29±18.4
	No	22.62±6.09	14.3±5.02	36.93±10.43	57.62±18.77
Statistical analysis	t	-0.32	-0.85	-0.60	0.35
	p	0.753	0.398	0.552	0.730

t: Student t test, X±SD: Average±Standard Deviation TUS-FA: Tolerance of Uncertainty Scale-Future Anxiety, TUS-PA: Tolerance of Uncertainty Scale-Preventive Anxiety, TUS- Total: Tolerance of Uncertainty Scale Total Score, CHS Total: Coping via Humor at the Workplace Scale Total Score

Table 4. Relationship between Certain Socio-demographic Qualities of Participants and their tolerance of uncertainty and coping via humor at workplace scores

Qualities	*	TUS-FA	TUS-PA	TUS-total	CHS total
CHS total	r	0.166	0.08	0.136	-
	p	0.001	0.1	0.005	-

*Pearson Correlation Analysis, TUS-FA: Tolerance of Uncertainty Scale-Future Anxiety, TUS-PA: Tolerance of Uncertainty Scale-Preventive Anxiety, TUS-Total: Tolerance of Uncertainty Scale Total, CHS: Coping Humor Scale

scale was 57.85 ± 18.62 (min= 24 ± 18.62 , max= 115 ± 18.62) and this value is lower than median level. In one study on healthcare professionals, average scores of the participants from the coping via humor scale were found to be higher than median level (Aslanoğlu et al., 2019). There are limited number of studies that focus on humor in literature. Studies that researched humor styles and coping via humor were conducted using different scales. In one study on healthcare professionals, it was found that higher exposure to trauma due to traumatic stressors was positively correlated with more frequent use of humor for coping (Demirci, 2016). In one study on Portuguese physicians and nurses, it was stressed that therapeutic humor had a positive effect on the patient and the healthcare professionals however that, in order for humor to be used, the patient should be a previously known individual (Almeida & Nunes, 2020). In one study on healthcare professionals in Spain, a training with main topics of utilizing humor, humor as a coping mechanism and humor in uncertainty, was integrated to practical trainings for 6 weeks. At the end of the training period, it was found that healthcare professionals had higher tendency to utilize humor and that this training could be beneficial for healthcare professionals who were exposed to high levels of work stress and negative impact of the pandemic in managing work stress (León-Pérez et al., 2021).

In the current study, no statistically significant correlation was found between the participants' ages, education, gender and whether or not they used humor in coping with stress at the workplace. Similarly, in another study that researched healthcare professionals' coping via humor at work place in the same manner, no statistically significant correlation was found between the participants' ages, education, gender and whether or not they used humor in coping with stress at the workplace (Aslanoğlu et al., 2019). In the literature, among studies where different humor styles were evaluated using different scales, there are ones that found a correlation with gender and ones that couldn't. In the current study, lack of a significant correlation between gender and use of humor for coping, and similarity of the work environments made authors conclude that all healthcare professionals used humor as a defense mechanism.

A statistically significant correlation was found between participants' marital status and their coping via humor scores. It was found that single participants had higher average scores for coping via humor at work place (59.57 ± 18.21) than married participants (55.99 ± 18.94). In one study by Türkoğlu and Tüfekçi on 114 nurses working at a children's clinic, single nurses were found to have higher scores for participant humor sub-scale than married nurses (Türkoğlu & Tüfekçi., 2021). In a study by Arslanoğlu et al. A significant correlation was found between marital status and coping via humor scores (Aslanoğlu et al., 2019). On the contrary, in one study by Aydın

on 59 adults as well as in a study by Güven on 254 surgery clinic nurses, no statistically significant relation was found between marital status and humor styles (Aydın, 2020). In their study on 10.000 adults in USA, Sarkisian and Gerstel found that single individuals were more social than married adults and they had stronger social relations (Sarkisian & Gerstel, 2016). Accordingly, the fact that singles had stronger social relations makes one conclude that their level of utilization of humor is higher. Findings of the current study as well support this finding.

In the current study, no statistically significant correlation was found between the work unit and coping via humor at workplace. As it was the case in the current study, regardless of the work unit, it was observed that positive humor ensured stronger communication, made it easier to deal with work stress and made it easier to solve problems faced.

It is argued that internet usage increased during the pandemic all over the world (Bischetti et al., 2021). There are studies that evaluated social media posts during the pandemic. Some of these studies were conducted in Jordan (Hussein & Aljamali, 2020), Poland (Chloppicki & Brzozowska., 2021), Italy (Bischetti et al., 2021), USA (Budhwani & Sun, 2020), UK (Liu et al., 2021), Spain (Cancelas-Ouviña, 2021), Slovakia (Torres et al., 2022), Indonesia (Lestari & Pradnyanita, 2020) and Turkiye (Subölen, 2020). Common finding of these studies was that social media posts born out of humor based on daily practices entertained people while at the same time reflecting realities in social life. In his theory of laughter, Bergson (2019) argued that circumstances arising from incompatibilities resulted in laughter. The internet environment where individuals could freely express their ideas on issues which they couldn't otherwise express directly, has turned into a social language and humor was used to spread the idea that people need to assume social responsibility and change their attitudes during the pandemic (Kutlu, 2021).

In one study in Italy, it was found that healthcare professionals' perceived risk during the pandemic increased parallel to increased infection risk and that those who used humor as a coping method showed less stress signs due to the pandemic (Canestrari et al., 2021). In one study on nursery students in Israel conducted during the pandemic, humor was found to be closely correlated with severe anxiety among the students. It was found that increase use of humor was negatively correlated with anxiety levels (Savitsky et al., 2020). Even though healthcare professionals used humor as a communication strategy before the pandemic, it was found that those who used humor worked in riskier units during the pandemic. Other studies supported the findings that increased use of positive humor by workers correlated with improved work performance and job satisfaction at the institution worked. Use of positive humor is also believed to result in a healthier work environment by lowering feelings of exhaustion and stress.

Correlation Between Tolerance of Uncertainty and Coping via Humor at Workplace

A low and statistically significant positive correlation was found between scores of future anxiety and scores of coping via humor at workplace among the participants. To the best of our knowledge, no study has directly examined the

relationship between intolerance of uncertainty and coping via humor in the workplace. However, a limited number of studies have investigated these constructs separately or in related contexts, suggesting a potential association between them.

Healthcare professionals are frequently exposed to uncertain and emotionally demanding situations such as death and bereavement. In such contexts, humor has been suggested as a potential protective factor against burnout (Bag, 2021). Building on these findings, humor may serve as a functional coping resource by facilitating communication and supporting individuals in managing uncertainty more effectively. Although individuals may differ in their humor styles, existing evidence indicates that humor occupies an important place in coping processes. However, given the limited number of studies directly examining the relationship between intolerance of uncertainty and humor-based coping in workplace settings, further research is needed to clarify the nature and direction of this relationship.

Limitations

Because the study design was descriptive-correlational, data collected was based on self-reporting, study sample included only voluntary online participants with internet access, and lack of use of a sampling method were the limitations of this study.

CONCLUSION

In the current study, it was observed that in cases where uncertainty dominates (working at pandemic units, having lost a patient due to the pandemic), healthcare professionals tended more to use humor for coping with uncertainty and that they refrained from using humor as a coping mechanism in situations more traumatic for themselves (such as being infected with pandemic or having lost a relative due to the pandemic). Because the pandemic can result in challenging life events for healthcare professionals, it is recommended to use methods like psychological consultancy at the individual and group levels and group guidance in order to help employees manage the negative impacts of the pandemic. Skill trainings that include effective coping strategies as well should be provided. Trainings about using humor as a coping mechanism can be added to on-the-job trainings provided to healthcare professionals.

Effective coping methods needs to be developed, psychological support units for preventing employees' mental health should be easily accessible and employees should be supported via positive feedback when necessary. Further studies focusing on tolerance of uncertainty and use of humor as a coping mechanism in healthcare professionals need to be carried out.

ETHICAL DECLARATIONS

Ethics Committee Approval

This study was conducted with the approval of the Ethics Committee of Istanbul Okan University (Date: 10.032021, Decision No: 134).

Informed Consent

Written informed consent was obtained from all individual participants prior to their inclusion in the study. Participants

were fully informed about the study's aims, procedures, potential risks and benefits, and their rights-including the right to withdraw at any time without consequence. All participants voluntarily signed a written informed consent form.

Peer Review Process

This manuscript was subject to external peer review.

Conflict of Interest

The authors declare no conflicts of interest related to this study.

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Author Contributions

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