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Araştırma Makalesi/ Research Article

Are there any Positive Impacts of a Pandemic? Posttraumatic Growth of Nurses Who are Struggling with COVID-19

Pandemi Sürecinin Olumlu Etkileri Olabilir Mi? COVID-19 ile Mücadele Eden Hemşirelerin Travma Sonrası Gelişimleri

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ÖZ

Amaç: COVID-19 pandemisinin sağlık çalışanlarında yüksek düzeyde akut stres bozukluğu, anksiyete, tükenmişlik sendromu, depresyon ve travma sonrası stres bozukluğuna neden olduğu bilinmektedir. Ayrıca COVID-19 hastalarıyla çalışan hemşirelerin bu süreçten daha fazla olumsuz etkilendiği ortaya konmuştur. Yaşanan travmatik olaylar kişiler üzerinde sadece olumsuz değişimlere yol açmazlar. Aksine, bazı kişiler yaşadıkları travmatik deneyimlerden sonra yaşamlarının pek çok alanını etkileyen olumlu değişimler de yaşarlar. Bu çalışma, COVID-19 ile mücadele eden hemşirelerin travma sonrası gelişimlerini belirlemek amacıyla yapılmıştır.

Yöntem: Araştırma, Türkiye'de Ocak-Mart 2021 tarihleri arasında COVID-19 pandemi kliniklerinde çalışan 559 hemşire ile tanımlayıcı olarak yapılmıştır. Araştırmanın verileri çevrimiçi anket yoluyla toplanmıştır.

Bulgular: Hemşirelerin Travma Sonrası Büyüme Envanteri toplam puanı 53.95±18.89 olarak bulunmuştur. Travma sonrası büyüme envanteri toplam puanı ile alt boyut puanları arasında orta ila güçlü pozitif yönde (0.61-0.94) bir ilişki vardır.

Sonuç: Literatürde hemşirelerin travma sonrası gelişim düzeyini değerlendiren çalışmalar incelendiğinde, çalışmamızda pandemi kliniklerinde çalışan hemşirelerin travma sonrası gelişim düzeylerinin ortalamanın altında kaldığı söylenebilir. Hemşirelerin travma sonrası gelişim düzeylerini değerlendiren çalışmaların düzenli aralıklarla yapılması ve olumlu gelişimlerini desteklemek için hemşirelere bütüncül destek sağlayacak merkezlerin yaygınlaştırılması önerilmektedir.

Anahtar Kelimeler: COVID-19, hemşire, travma sonrası gelişim, pandemi, psikolojik etki

ABSTRACT

Objective: It is known that COVID-19 pandemic causes high levels of acute stress disorder, anxiety, burnout syndrome, depression and, post-traumatic stress disorder in health professionals. In addition, it has been revealed that nurses working with COVID-19 patients are more negatively affected by this process. Actually, experienced traumatic events do not only lead to negative changes in people. On the contrary, some people also experience positive alterations after traumatic events, which affect their lives in various areas. This study was conducted to determine the post-traumatic growth of the nurses struggling with COVID-19.

Methods: The research has been made as a descriptive study with the 559 nurses working in COVID-19 pandemic clinics between January-March 2021 in Turkey. The data of the research were collected in an online survey.

Results: Post-traumatic growth inventory total score of the nurses is found as 53.95±18.89. There is a medium to strong (0.61-0.94) positive correlation between post-traumatic growth inventory total score and sub-dimension scores.

Conclusion: In literature, when other studies which examined the nurses' post-traumatic growth levels are checked, it can be said that; in our study, nurses' post-traumatic growth levels remained below the average. It is recommended that studies evaluating nurses' post-traumatic growth levels should be carried out at regular intervals and centers that will provide holistic support to nurses to support their positive development should be expanded.

Keywords: COVID-19, nurse, post-traumatic growth, pandemic, psychological effects

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Introduction

On March 11, 2020, a global pandemic period began due to the new coronavirus (SARS-CoV-2) spread that humans had not detected before (World Health Organization, 2020). One of the groups most impacted by this pandemic process, as can be estimated, has been health professionals. Health professionals; have been affected by the process seriously, both physically and psychologically, due to various reasons such as; workload increase, critical positions of the patients under treatment, contamination risk of infection and fear of transmitting the infection, being far away from his/her family, losing his/her workmates due to virus (Gedik, 2021; Huremović, 2019; Temsah et al., 2020).

Various research has been conducted and published to assess the pandemic's effect on health professionals. In a systematic review made over 117 different studies in which the pandemic's effect on frontline health professionals is examined, high levels of acute stress disorder, anxiety, burnout syndrome, depression, and post-traumatic stress disorder have been observed in health professionals, both during and after the pandemics (Serrano-Ripoll et al., 2020). Furthermore, it should be noted that those who have had the worst psychological outcomes during the pandemic are those who work directly with the patients (Stuijfzand et al., 2020). In the studies made with health professionals working with COVID-19 patients, it is expressed that the mental problems experienced by nurses are higher and more severe than the doctors' (Huang et al., 2020; Lai et al., 2020).

Experienced traumatic events do not only lead to negative changes in people. On the contrary, some people also experience positive alterations after traumatic events, which affect their lives in various areas. Focusing only on the negative effects of trauma can result in an incomplete and inaccurate understanding of trauma reactions. For this reason, it is now emphasized that the positive effects of trauma should also be assessed. Besides the negative results after – trauma, it is stated that; dwelling on positive results shall provide a significant contribution for coping with challenging life problems (Jayawickreme et al., 2021).

The argument that the individual who has been affected by negative incidents may improve and display positive development is not a new approach, it goes back a long way. Examining the negative effects of trauma on a person has been increasing since the mid-1990s (Calhoun and Tedeschi, 2013). Particularly, upon Martin Seligman's speech in 1999 in US Psychologists Association Congress, the studies discussing the positive effects of the traumas are stated to have increased (Hefferon and Boniwell, 2011).

After the traumatic experience, there may be positive changes in some areas, although it varies from person to person. The individual can become more conscious of each new day's value, feel stronger, be content with the life of the people he loves, place greater emphasis on human relationships, and undergo spiritual and existential changes (Tedeschi and Moore, 2016). Moreover, after trauma, individuals may see life as a second gift presented to them and cherish little things (Walker-Williams et al., 2013). How the individuals react after the traumatic experience is vital both individually and socially, and individuals are desired to reveal positive changes (Briere and Scott, 2016).

In light of the examined literature, it is seen that; after traumatic events, people change their point of view towards themselves and the people around them and may introduce new things and innovations into their lives. It is observed that; in their journey which they search for the meaning of life which they stepped in along with the tough cases experienced, their beliefs have been intensified and become stronger; they have been establishing deeper and stronger ties in their interpersonal relations and their self-confidence has been increasing as a result of their struggle (Tedeschi, 1999; Tedeschi et al., 1998; Tedeschi and Calhoun, 2004). This study was conducted to determine the post-traumatic growth (PTG) of the nurses struggling with COVID-19.

Research Questions

1. What is the post-traumatic development of nurses struggling with COVID-19?

2. Is there a relationship between the nurses' sociodemographic characteristics and post-traumatic growth?

Methods

Design and Setting

The research has been made as a descriptive study over the nurses working in COVID-19 pandemic clinics in Turkey.

The research's population consists of all the nurses who are either working or worked in pandemic clinics in Turkey. In determining the sample size, the number of working nurses (227202) in the Health Statistics Yearbook of 2020 was taken as reference (T.C. Sağlık Bakanlığı Sağlık Bilgi

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Sistemleri Genel Müdürlüğü, 2020). The sample size of the study was calculated as 384, with α=0.05, β=0.95 using the online Raosoft® program. The inclusion criteria were (1) working in the pandemic service for at least one month; (2) being to use a smart phone and can fill out an online questionnaire; (3) volunteering to participate in the study. To reach the nurses, a snowball sampling was used as one of th a non-probability sampling technique. Nurses to be included in the study first were chosen among researchers' and their co-worker' social enviroment. Later on, through these nurses, their colleagues who are appropriate for the study were also included in the research. In this way, an online questionnaire form was sent to nurses working in the pandemic to reach the minimum sample size calculated. When the online form was examined to check whether the calculated sample was reached, it was seen that the questionnaire response number was 563. The exclusion criteria were as follows: (1) any nurses who did not continue to answer the questions; (2) the nonreliable data, such as answering all questions in the same (1,2,3,4, or 5) or failing to answer any question; (3) any nurses working in a pandemic for less than 1 month, based on their data. Four nurses were excluded from the study due to submitting their online forms with insufficient data. During January -March 2021, the research was concluded with the participation of 559 nurses.

Data Collection Tools

Data of the research were collected by using "Nurse Introduction Form and "Posttraumatic Growth Inventory" (PTGI).

Nurse Introduction Form

This form, which is prepared by the researchers, includes various questions about demographic data, including age, gender, educational status, civil status, as well as various questions regarding the nurses' work positions. Before beginning to collect data, five nurses were included in pre-application, apart from sampling, and the form was put into its final position.

Posttraumatic Growth Inventory

Posttraumatic Growth Inventory, which Tedeschi and Calhoun (1996) developed, consists of 21 questions and is used to measure positive post-traumatic changes. The scale is in a six-point Likert scale. The scale has five dimensions; relations with other persons (questions 6, 8, 9, 15, 16, 20, and 21), new opportunities (questions 3, 7, 11, 14, and 17), personal endurance (questions 4,10, 12 and 19), spiritual change (questions 5 and 18) and appreciation of life (questions 1, 2 and 13) (Tedeschi and Calhoun, 1996). Kağan et al. (2012) made Turkish validity and reliability study for the scale. The scale, which consists of five dimensions and 21 articles in its original form, was declined to three dimensions in the Turkish validity and reliability study, where the number of articles remained constant. In the life philosophy of the scale, there are three sub-dimensions: change in the sense of self and change in relations with others. The distribution of the sub-dimensions of the articles of scale is; change in life philosophy (questions 1, 2, 3, 4, 7, and 14), change in the sense of self (questions 5, 10, 11, 12, 13, 15, 16, 17, 18 and 19) and change in relations with others (questions 6, 8, 9, 20 and 21). The minimum score that can be received from the scale is 0, whereas the maximum score is 105. While the scale is being assessed, a total score is used. Receiving high scores from the scale indicates that the relevant person has shown PTG and has experienced the trauma's positive results. In the Turkish reliability and validity research of the six-point Likert type scale with 21 articles, the Cronbach alpha coefficient is found as 0.92 (Kağan et al., 2012). In this study, the scale's Cronbach alpha coefficient is found as 0.92.

Data Collection

Data were collected in an online questionnaire form. The online form was designed so that the participants are allowed to fill it only once. In research before the questionnaire forms, information regarding the research's purpose and a choice for the attendants' approval were added. Participants who marked this option as "I agree to attend" attended the study by answering the questions. In the study, it took around five minutes to answer the scale articles.

Statistical Analysis

The data were analyzed using IBM SPSS (Statistical Package for the Social Sciences) version 24 (SPSS Inc., Chicago, IL, USA). Descriptive statistics of variables were given as; the number of units (n), percentage (%), mean (X), standard deviation (SS), medium, and percentage. Numerical data's compliance with normal distribution was assessed by kurtosis – skewness coefficient. The homogeneity of variances was checked by the Levene test. For the variables revealing normal distribution, independent two sampling t-test, one-direction variance analysis (ANOVA), and Pearson correlation analysis were used. In the study, $p<0.05$ value is accepted meaningful statistically.

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Results

The study findings made to determine the nurses' PTG levels are given below. Table 1 shows the socio-demographic properties of the participating nurses. 66.5% of the nurses are 30 years old, and below, 82.6% of them are women, 56.7% are bachelor, 80.9% have received license degree, 65.5% have no children, 90.0% are working in state hospital/training and research hospital, 56.4% have been working as a nurse for 0-5 years, 39.4% have been working in pandemic services, and 61.5% have been working for 7-12 months in pandemic services (Table 1).

Table 1. Sociodemographic characteristics of nurses (n=559)

Characteristics	Number (n)	Percent (%)
Age (years) Median (Q1-Q3)	27.00 (24.00-34.00)	
≤30 years	372	66.5
>30 years	187	33.5
Gender		
Female	462	82.6
Male	97	17.4
Marital		
Single	317	56.7
Married	242	43.3
Education		
High school	42	7.5
License	452	80.9
Postgraduate	65	11.6
Having children		
Yes	193	34.5
No	366	65.5
Hospital		
Private Hospital	18	3.2
State Hospital / Training and Research Hospital	503	90.0
University Hospital	38	6.8
Working year as a nurse		
0-5 year	315	56.4
6-10 year	122	21.8
11-15 year	10	1.8
>15 years	112	20.0
Service worked in the pandemic		
Pandemic service	220	39.4
Pandemic emergency service	146	26.1
Pandemic intensive care service	193	34.5
Working time in pandemic services (months) Median (Q1-Q3)	8.00 (5.00-10.00)	
0-6 months	215	38.5
7-12 months	344	61.5
TOTAL	559	100.0

In Table 2, nurses' PTGI total scores, sub-dimension scores, and article score averages are given. It was determined that the mean score of the change sub-dimension of life philosophy was 14.98 ± 5.61, the mean score of the change in the sense of self sub-dimension was 29.15 ± 9.92, the mean score of the sub-dimension of change in relationships with others was 9.82 ± 5.65, and the total scale score was 53.95 ± 18.89.

It was also determined that change of life philosophy of the scale sub-dimension average score is; 2.49±0.93, change in the sense of self sub-dimension average score is; 2.91±0.99, change of relation with others sub dimension average score is; 1.96±1.13, and total scale average item score is; 2.56±0.89 (Table 2).

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Table 2. Post Traumatic Growth Inventory (PTGI) scores (n=559)

	Item Point Mean Item ($\bar{x}$ ±SD)	Total Score Mean $\bar{x}$ ±SD
Change in life philosophy	2.49±0.93	14.98±5.61
Change in the sense of self	2.91±0.99	29.15±9.92
Change in relations with others	1.96±1.13	9.82±5.65
TOTAL SCORE	**2.56±0.89**	**53.95±18.89**

On the other hand, Table 3 shows PTGI total and sub-dimension average score distribution, according to the nurses' socio-demographic properties. According to the Table 3, in line with the nurses' demographic properties, it is found that; PTGI total and the sub-dimension average scores are not meaningful (p>0.05) (Table 3).

Table 3. Distribution of PTGI total and sub-dimension mean scores according to the sociodemographic characteristics of the nurses (n=559)

Features	Change in life philosophy	Change in the sense of self	Change in relations with others	TOTAL SCORE
Age Group				
30 years and under	15.29±5.44	29.30±9.83	9.74±5.59	54.34±18.43
Over 30 years old	14.35±5.90	28.84±10.13	9.98±5.79	53.18±19.80
Statistical value	t:1.878, p=0.061	t:0.521, p=0.602	t:-0.471, p=0.637	t:0.689, p=0.491
Gender				
Female	15.09±5.57	29.16±9.80	9.74±5.66	54.00±18.83
Male	14.744±5.79	29.08±10.52	10.22±5.62	53.76±19.29
Statistical value	t:1.036, p=0.300	t:0.067, p=0.947	t:-0.770, p=0.442	t:0.112, p=0.911
Marital				
Single	15.06±5.66	29.09±10.35	9.82±5.82	53.99±19.55
Married	14.86±5.54	29.23±9.36	9.82±5.44	53.91±18.04
Statistical value	t:0.429, p=0.668	t:-0.161, p=0.872	t:0.009, p=0.993	t:0.045, p=0.964
Education				
High school	15.21±6.09	30.35±10.79	10.71±5.98	56.28±20.91
License	14.80±5.45	29.09±9.72	9.69±5.60	53.59±18.35
Postgraduate	16.07±6.27	28.81±10.82	10.12±5.86	55.01±21.26
Statistical value	F:1.510, p=0.222	F:0.355, p=0.702	F:0.720, p=0.487	F:0.505, p=0.604
Having Children				
Yes	14.80±5.74	29.45±9.55	9.93±5.65	54.20±18.65
No	15.07±5.54	28.99±10.12	9.76±5.66	53.83±19.04
Statistical value	t:-0.526, p=0.599	t:0.522, p=0.602	t: 0.343, p=0.732	t:0.221, p=0.825
Hospital				
Private Hospital	15.77±7.46	31.88±14.59	11.72±7.59	59.38±27.73
State Hospital / Training and Research Hospital	14.98±5.54	29.11±9.71	9.72±5.56	53.82±18.51
University Hospital	14.50±5.65	28.36±10.22	10.26±5.88	53.13±19.17
Statistical value	F:0.320, p=0.726	F:0.805, p=0.447	F:1.207, p=0.300	F:0.791, p=0.454
Working year as a nurse				
0-5 year	15.31±5.37	29.50±9.96	9.88±5.66	54.71±18.61
6-10 year	14.64±6.19	27.81±9.78	8.93±5.65	51.40±19.42
11-15 year	14.20±6.25	28.00±11.39	10.00±5.69	52.20±22.34
Over 15 years	14.46±5.56	29.71±9.84	10.60±5.59	54.78±18.78
Statistical value	F:0.901, p=0.440	F:1.032, p=0.378	F:1.743, p=0.157	F:1.012, p=0.387

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Table 3. (Continued) Distribution of PTGI total and sub-dimension mean scores according to the sociodemographic characteristics of the nurses (n=559)

Features	Change in life philosophy	Change in the sense of self	Change in relations with others	Total Score
Service worked in the pandemic				
Pandemic service	15.29±5.31	29.43±9.46	10.09±5.75	54.82±18.25
Pandemic emergency service	14.95±5.87	29.33±10.25	10.00±5.71	54.29±19.71
Pandemic intensive care service	14.76±5.54	28.74±9.92	9.41±5.52	52.92±18.46
Statistical value	F:0.369, p=0.692	F:0.259, p=0.772	F:0.785, p=0.456	F:0.447,p=0.621
Working time in pandemic services (Month)				
0-6 month	15.07±5.86	28.84±10.36	9.95±5.91	53.88±19.72
7-12 month	14.91±5.45	29.34±9.65	9.74±5.50	54.00±18.38
Statistical value	t:0.329, p=0.743	t:-0.578, p=0.563	t:0.441, p=0.660	t:-0.074, p=0.941

t= *Independent two samples t test*
F=One-way analysis of variance (ANOVA)

The results of the correlation made for determining the relation between the nurses' PTGI total score and sub-dimension scores are given in Table 4. According to the Table, there is a medium and strong positive direction between the nurses' PTGI total score and sub-dimension scores at the (0.61-0.94) range.

Table 4. Relationship Between Nurses' PTGI and Sub-Dimension Scores (n=559)

PTGI Sub-dimension	Change in life philosophy	Change in the sense of self	Change in relations with others	**Total Score**
	r	*r*	*r*	*r*
Change in life philosophy	1			
Change in the sense of self	0.719	1		
Change in relations with others	0.616	0.675	1	
TOTAL SCORE	0.859	0.941	0.837	1

Discussion

According to the literature, the pandemic has had a significant traumatic impact on health workers' lives. Furthermore, health professionals may have various concerns during the pandemic, including access to personal protective equipment, fear of transmitting the infection, exposure to COVID-19, and transmission of the infection to their families (Kisely et al., 2020). For the higher degree of health services, health professionals' development levels are required to be known. In the pandemic process, regarding the nurses that have a significant effect and role within the scope of health services, it is crucial to know their growth levels. As a matter of fact, in this study, nurses' PTG levels were examined. The number of studies that have been done to determine nurses' PTG levels is very limited in the literature.

In the study, the PTGI total score of the nurses working at COVID-19 pandemic clinics is found as 53.95±18.89. The lowest score that can be received from this scale is 0, whereas the highest score is; 105. Higher scores received from the scale reveal that the person has displayed Posttraumatic growth and experienced the positive results thereof. Therefore, it can be stated that the PTG levels of nurses are medium level. In the study on over 167 nurses struggling with COVID-19, nurses' PTGI total score is; 70.53±17.26 (Cui et al., 2020). During this thought process, no further study is found to have been made, including the nurses' PTG levels. When the studies on nurses' development are examined in the literature, the PTGI average score seems to be between; 64.8-78.1 (Beck and Casavant, 2020; Hamama-Raz et al., 2020a; Hamama-Raz et al., 2020b; Lee and Kim, 2020; Okoli et al., 2021). Based on these findings, it can be stated that the PTGI scores of the nurses in our study were below the average. After experiencing the trauma, various changes are observed in a positive direction in the individual's life, such as; establishing more meaningful interpersonal relations, an increase in the personal powerfulness emotion, changing life priorities, as well as getting richer in spiritual life (Tedeschi and Calhoun, 2004). Post-traumatic positive changes are stated to exist just after the

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trauma or in due course, and PTG levels may increase as well (Baillie et al., 2014; Bayram et al., 2018). Based on the study was made during the pandemic period, it is thought that; nurses' PTG levels are at a medium level, and in time it may record an increase. Also, Joseph and Linley set forth that PTG may occur in various ways, for instance, through increasing the value of friends/ family and/or by changing core and worldview (Joseph and Linley, 2006). Accordingly, development may not be originated from the pandemic directly, and for this reason, PTG scores may have been found lower than other studies.

The study stated that there had been a medium and strong (0.61-0.94) relation between the nurses' PTGI total score and sub-dimension scores. Based on these results, when the development increases in one dimension, it is seen that the development increases in all dimensions. Texeira and Pereira's study (2013), revealed that a medium and strong correlation exists between PTGI total score and sub-dimension scores. Correlations between the factors change between 0.49- 0.81, and a correlation between 0.72-0.92 intervals exist between total PTGI score and sub-dimension scores (Teixeira and Pereira, 2013). Similarly, in the da Silva et al. (2018) study, a medium and strong correlation (0.58-0.87) exists between scale total score and sub-dimension scores. It was also revealed that; a low-medium level relation exists among scale sub-dimensions. The medium and strong correlation between the sub-dimensions and the total score of PTGI in our study shows that the sub-dimensions of the scale can be used to measure PTG.

In the study, no significant difference was found between the nurses' age, gender, marital status, work year, educational level, childbearing status and clinical properties, and PTG. Again, in a study made with nurses, no significant difference was found between age, gender, civil status, work year, income and training status, and PTG (Zerach and Shalev, 2015). In another study made again with nurses, a meaningful difference was determined between PTG sub-dimension and total scores and age, educational level, childbearing status, work time in the profession (Yılmaz and Üstün, 2019). It is thought that this difference in the literature may be originated from the properties of the workgroups. Besides, in our study, as the pandemic process continues, it is thought that development may not have been completed. For this reason, similar growth scores may exist in every group. In a meta-analysis relevant to PTG, it is stated that PTG level may change depending on the effect, the intensity, and magnitude of the trauma experienced, as well as to the person's belief, cognitive structure, his capability to use the empathy correctly, and according to the elapsed time (Shakespeare-Finch and Lurie-Beck, 2014). The importance of emotional support for providing PTG was emphasized. Along with emotional support, it is stated that a person's social supports, the capability to handle the challenges, civil status, and income level are among the factors which affect PTG (Wang et al., 2017). It is known that; nurses' PTG levels are affected by some factors, such as their professional self-respect level, social support, and meaning in the study (Gómez-Salgado et al., 2019; Măirean, 2016; Taubman-Ben-Ari and Weintroub, 2008). In our study, besides the socio-demographic properties, the non-existence of these factors, which are thought to affect PTG, made it difficult to explain why the development levels are lower than in other studies.

Besides, it is stated that; physical, emotional, and psychological assistances are important factors for the provision of PTG. The results of this study highlight the importance of assessing the PTG levels of nurses employed in pandemic clinics regularly and maintaining the requisite supports to raise PTG levels. In the health system, there are some centers that serve this purpose. A Stress, Resistance, and Personal Development Center have been established in New York to reduce the negative effects on health professionals, of which nurses are an important part, and provide/increase their development (Depierro et al., 2020). Within this context, it may be suggested that the centers in which the nurses may be provided holistic assistance should be increased.

Conclusions

During the pandemic process, nurses' PTG levels were found as low. In literature, when other studies which examined the nurses' PTG level are checked, it can be said that; in our study, nurses' posttraumatic growth levels remained below the average. It is known that positive post-traumatic changes may occur just after trauma, or PTG levels may increase in the process of time (Baillie et al., 2014; Bayram et al., 2018). As a result, surveys measuring the nurses' PTG levels should be conducted by the end of the pandemic or at certain intervals. Besides, it is thought that; making a study on the factors which may affect the nurses' developments, such as; social support, professional self-respect, meaning in the study, may contribute to the literature. In this process, to enable the frontline

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health workers to be affected by this process at a minimum level and to support positive developments, it is emphasized that; physical, emotional, and psychological assistance are important. To this end, centers that would introduce holistic support for the nurses are suggested to be expanded.

Limitations

This study involves some restrictions. The study's descriptive design has impeded the determination of causality. The research was done on the nurses who can be accessed through an online questionnaire procedure. Besides, as the younger generation (age average: 27.00) in the research does not reflect the entire population, this may be considered as a constraint.

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Ethics Committee Approval: The ethical approval was obtained from the ethics committee of Nevşehir University with a project number of NU/2021.01.16 (approved on 12.01.2021). Nurses were provided information about the study's objective and scope; after that, they are approved to attend the study online.
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What did the study add to the literatüre?

- It is very important to evaluate the psychological health of nurses in this difficult process.
- To properly understand the effects of the trauma experienced, it is necessary to evaluate its positive and negative effects together.
- Nurses performing their profession in these difficult conditions need to be evaluated both intermittently for post-traumatic growth and applications should be made to support growth.

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