Evaluation of Corona Anxiety, Generalized Anxiety, Post-Traumatic Stress, Quality of Life and Stress Coping Styles in COVID-19 Survivors

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Abstract

Objectives

The study aims to evaluate coronavirus anxiety, generalized anxiety, post-traumatic stress symptoms (PTSS), quality of life (QOL) levels and coping styles with stress in COVID-19 survivors, as well as to assess these factors by comparing with people who have not had COVID-19.

Methods

The number of COVID-19 survivors, who suffer from the psychosocial impacts of the pandemic, is also increasing. The study was conducted between February 15- April 5, 2021 as a cross-sectional study design in a city, in Turkey. 113 people who confirmed with COVID-19 by clinical tests in the last 3 months and 107 people who have not had COVID-19, randomly participated in the study. Scales were used which evaluating generalized anxiety, corona anxiety, post-traumatic stress, quality of life and coping styles.

Results

COVID-19 survivors had higher generalized anxiety. PTSS was high in both groups, but there was no difference between the groups. Corona anxiety was higher in the group who have not had COVID-19. The QOL levels of the participants were found to be low in all domains. Furthermore, COVID-19 survivors had poorer QOL. A negative correlation was found between corona anxiety and generalized anxiety.

Conclusion

COVID-19 survivors, whose number has exceeded millions and increased over time, suffer from serious psychosocial problems. Psychosocial intervention studies should be conducted and public mental health strategies should be developed. Providing psychosocial support and psychological guidance will contribute to mental health well-being and improve the QOL.

Introduction

The novel coronavirus that causes 2019 coronavirus disease (COVID-19) originated in China, where it started at the end of 2019, spread rapidly throughout the world in a short period of time, and became a serious pandemic. Previous rapidly spreading and large-scale pandemics, such as the Spanish flu, Ebola, severe acute respiratory syndrome (SARS), and the H1N1 flu, caused crises to develop all over the world and large numbers of people to be affected. The current COVID-19 pandemic has spread to almost every country in the world and is still not under control even though it has been more than a year since it began. Individuals throughout the world have been adversely affected by COVID-19, both psychologically and socioeconomically, due to the increasing numbers of cases, the numbers of deaths that have resulted from it, and the restrictions placed on individuals and on their social activities to prevent the spread of the disease.
Previous studies have shown that post-traumatic stress symptoms (PTSS) can occur after serious traumas such as pandemics (1–3). Studies conducted during the COVID-19 outbreak have reported high levels of PTSS and anxiety (4, 5). Due to the continuation of the pandemic process, the inability to control the outbreak, and the delays in vaccination studies, the levels of anxiety among people have gradually increased, and this has negatively affected their private lives, business lives and social lives. Recent studies have reported high levels of generalized anxiety in individuals (6–8). Coronavirus anxiety, which was defined specifically in relation to the COVID-19 outbreak, describes the dysfunctional anxiety with which this disease is associated (9). The uncertainty regarding the duration of the pandemic has also caused coronavirus anxiety to increase gradually.

The ability to manage stress can be greatly influenced by people's perceptions of the potential stressor and their styles of coping with stress. Lazarus and Folkman defined coping with stress as managing stress and adapting to stressful conditions (10, 11). The literature includes studies showing that there is a relationship between coping styles and stress and psychological disorders (12, 13). Psychosocial and economic problems related to the pandemic have caused decreases in the people's quality of life, resulting from problems such as losses in workforces and productivity relating to both individual and social aspects of life.

To the best of our knowledge, this is the first study to examine the relationship between COVID-19 and sociodemographic characteristics and to investigate coronavirus anxiety, generalized anxiety, post-traumatic stress, quality of life, and coping styles in terms of stress among people who have been confirmed with COVID-19 (COVID-19 survivors). In addition, based on the literature, this study is the first to evaluate these factors by comparing people who have had COVID-19 to those who have had not.

**Method**

The population of our study included people living in Antalya who have been confirmed COVID-19 through clinical polymerase chain reaction (PCR) tests done in the previous 3 months and people who have not had COVID-19.

Our cross-sectional study, which was conducted between February 15 and April 5, 2021, included 113 COVID-19 survivors who were randomly selected using records at Antalya Training and Research Hospital and then contacted by telephone or email, and who also agreed to participate. The group of those who had not been infected with the virus causing COVID-19 was chosen from among relatives of the patients who had applied to Antalya Training and Research Hospital Psychiatry Clinic and consisted of 107 people who agreed to participate. People in the group that had not had COVID-19 were also randomly selected, and the number in this group was similar to that of the COVID-19 survivor group. Participants in both groups completed forms with questions regarding sociodemographic data. The Coping Style Scale (CSS), the Generalized Anxiety Disorder 7-Item (GAD-7) Scale, the Corona Anxiety Scale (CAS), the Impact of Event Scale-Revised (IES-R), and the World Health Organization Quality of Life Scale Brief Form Turkish Version (WHOQOL-BREF-TR) were applied to the participants for the assessments.

Individuals were excluded if they had chronic psychiatric illnesses (psychosis, schizophrenia, and mood disorders, etc.), which were determined based on regular use of psychotropic medication in the previous three
months, were under 18 years of age, had mental retardation, or had any alcohol or other substance use disorders.

The study was approved by ‘the Ethical Committee of Antalya Training and Research Hospital’ (approval number: 2021-019) and the scientific research platform of the Republic of Turkey Ministry of Health (file no: 2021-03-17T14_49_35).

**Assessment Tools**

**Coping Style Scale**: The Ways of Coping Inventory developed by Folkman and Lazarus (1980) is a 4-point Likert-type and 66-item scale that is frequently used in studies examining the issue of coping with stress (10). The short form of this scale was developed by Şahin and Durak (1995) as a derivative that was adapted to Turkish society and named the Coping Style Scale (14). The CSS is a 4-point Likert-type (ranging from 0 to 3) and 30-item self-report scale. It consists of five sub-dimensions: self-confident (7 items), optimistic (5 items), helpless (8 items), and submissive (6 items) styles and seeking social support (4 items). The CSS also includes a two-dimensional structure as well as an effective style and an ineffective style. High scores with regard to the sub-dimensions indicate which style an individual uses most.

**Generalized Anxiety Disorder 7-Item Scale**

The GAD-7 scale is a short self-report test that assesses common symptoms of anxiety. Seven items are used to assess the frequency of anxiety symptoms over the previous two weeks on a 4-point Likert-scale ranging from 0 (never) to 3 (nearly every day). The total scores of the GAD-7 scale range from 0 to 21, with higher scores indicating more severe functional impairments as a result of anxiety (15). The severity of the anxiety in this scale is determined according to the total score. With respect to the total score range, 0 to 4 is considered to be mild, 5 to 9 is moderate, 10 to 14 is high, and 15 to 21 indicates severe anxiety. The most acceptable cut-off point for the Turkish version of the GAD-7 scale was found to be 8. The Turkish validity and reliability study was performed by Konkan et al. (16).

**Impact of Event Scale-Revised**

This is a self-report scale developed by Weiss and Marmar (17). The IES-R is a 5-point Likert-type scale (ranging from 0 to 4 point) with a 22-item self-report questionnaire that assesses traumatic stress symptoms of intrusion, avoidance, and hyperarousal and presents a total score for the subjective stress related to a traumatic event. The scale does not have a specific cut-off score, high scores are interpreted as high traumatic stress (18). The total IES-R score was subdivided into 0–23 (normal), 24–32 (mild), 33–36 (moderate), and > 37 (severe psychological impact) (42). The Turkish validity and reliability study was conducted by Corapcioglu et al. (19).

**World Health Organization Quality of Life Scale Brief Form Turkish Version (WHOQOL-BREF-TR)**

The WHOQOL-BREF consists of 26 questions in four domains, namely physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental (8 items). It also contains two items that examine self-perception of overall quality of life (QOL) and overall health (20). The 27th
question has been added to the Turkish version, and this question has been added to the calculation in the environmental score. This is why the environmental area score is called "environmental-TR" (21, 22). Each question rated on a 5-point Likert scale. The scores within each domain are averaged. These average domain scores are multiplied by 4 to obtain transformed scores on a scale of 4–20 according to the guideline of the study instrument. Finally, the transformed domain scores are transformed linearly to a 0–100 scale with a higher score indicating better QOL (20). The WHOQOL-BREF scale does not have a total score, that is, a single quality of life score cannot be reached by adding the scores of all domains.

**Coronavirus Anxiety Scale (CAS)**

CAS developed by Lee (2020) to identify possible causes of dysfunctional anxiety associated with the COVID-19 outbreak (9). Each item was rated on a 5-point scale to reflect the frequency of the symptom, ranging from 0 (not at all) to 4 (nearly every day). The cut-off score in studies evaluating the psychometric properties of the scale; Different results were found with 9 points (9) and 5 points (23). In the last study, when the cut-off score was taken as ≥ 5 points, the results were found to be consistent with the first study and reported to support its validity (24). In our study, we determined the cut-off score as ≥ 5 points. The Turkish validity and reliability study of the scale was conducted by Bicer et al. (25).

**Statistical analysis**

Descriptive analyses (frequencies or means and standard deviations) were obtained initially.

Independent sample t-test was used to determine the differences between groups. Chi-square analysis was used to test the homogeneity of the groups and the relationships of categorical variables. Pearson's correlation analysis was used to evaluate the relationship between variables. The value of statistical significance was accepted as P < 0.05 in all tests. Statistical analysis was performed using the 21.0 version of SPSS Windows program.

**Results**

COVID-19 survivors were between the age of 23-66 and the mean age was 38.33 ± 11.12. Participants who have not had COVID-19, were between age of 22 and 68 and the mean age was 38.43 ± 10.31. There was no statistical significant difference between the groups in terms of age (p>0.05) (t = 0.71; p = 0.943).

The percentage of COVID-19 survivors was 45.1% (n = 51) in men and 54.9% (n = 62) in women. The percentage of male who have not had COVID-19 was 46.7% (n = 50) and female 53.3% (n = 57). There was no statistical significant relationship between gender and COVID-19 (p>0.05). Other sociodemographic data of the participants are shown in Table-1. According to these results, there was no statistical significant relationship between COVID-19 with educational status, whether to living alone at home, history of psychiatric disease and have chronical illness (p>0.05). On the other hand, a significant relationship was found in terms of have regular income and marital status (p<0.05) (Table-1). The rate of COVID-19 cases was found to be 45.77% (65/142) in married participants and 61.53% (48/78) in single participants. Additionally the rate of COVID-19 cases was found to be 40.38% (42/104) in participants who have a regular income and 61.2%
(71/116) in participants who have not regular income. According to these results, people who are single and have not a regular income were found to have a higher risk to have COVID-19.

The mean score of GAD-7 scale in COVID-19 survivors was 14.58 ± 3.63 and in participants who have not had COVID-19 was 11.58 ± 4.02. These scores, which are quite above the cut-off score, showed that both groups had high levels of general anxiety. Additionally there was a statistically significant difference between the groups (p<0.05). Percentages of participants in each group were determined according to the generalized anxiety symptom severity. The percentage of participants with mild, moderate, high and severe anxiety, respectively; was found to be 3.5%, 7.1%, 43.4%, 46.0% in COVID-19 survivors and 2.8%, 29.9%, 39.3%, 28% in participants who have not had COVID-19. According to the results of the Chi-square test for comparison between the groups, statistically significant relationship was found between COVID-19 disease and generalized anxiety symptom severity (χ² = 20.836; p = 0.001) (Table-2).

The mean score of CAS in COVID-19 survivors was 2.67 ± 2.15 and in participants who have not had COVID-19 was 4.03 ± 1.99. There was a statistically significant difference between the groups (p<0.05) (Table-2). In addition, the percentage of participants with CAS score of ≥5, was found as 21.2% (n = 24) in COVID-19 survivors and was 34.5% (n = 37) in participants who have not COVID-19. There was a statistically significant difference between the groups (p <0.05).

The mean total score of IES-R in COVID-19 survivors was 45.65 ± 14.79 and in participants who have not had COVID-19 was 45.54 ± 8.15. These results show that both groups experienced a serious psychological impact (the total IES-R score was >37). Additionally, there was no statistically significant difference between the groups (p >0.05) (Table-2). The IES-R subdimensions ‘intrusion’, ‘avoidance’ and ‘hyperarousal’ mean scores compared between the groups, respectively, in COVID-19 survivors were 16.05 ± 6.89, 16.64 ± 5.55, 13.24 ± 4.59 and in participants who have not had COVID-19 17.38 ± 4.09, 16.76 ± 4.24, 11.39 ± 1.55. There was no significant difference between the groups in intrusion and avoidance subdimensions (p>0.05). On the other hand, there was a significant difference in the hyperarousal subdimension (p<0.05). In addition, the percentage of participants with IES-R score of >37, was found as 32% (n = 36) in COVID-19 survivors and was 60.3% (n = 67) in participants who have not COVID-19. There was a statistically significant difference between the groups (p <0.05).

Participants’ styles of coping with stress were compared with CSS subdimensions. There was significant difference between the groups in ‘seeking social support’ and ‘helpless style’ subdimensions (p<0.05). There was no significant difference in other subdimensions (p>0.05) (Table-2).

QOL of participants was assessed with the WHOQOL-BREF-TR scale. QOL domains and items were compared between the groups. There was significant difference was found between the the groups in the items of ‘overall perception of QOL’ and ‘overall perception of health’, domains of ‘social relationship’ and ‘environmental-TR’ (p<0.05). There was no significant difference in other domains (p>0.05) (Table-2).

Pearson correlation analysis was used to determine whether there was a relationship between corona anxiety, generalized anxiety and post-traumatic stress factors. The groups was examined separately and the results were similar in both groups. There was positive significant relationship between generalized anxiety with post-traumatic stress (p <0.05) and significant negative correlation was with corona anxiety (p<0.05). There was significant positive correlation was found between corona anxiety with post-traumatic stress (Table-3).

Conclusions
The morbidity and mortality rates due to COVID-19 are increasing gradually. The current number of COVID-19 cases worldwide is approximately 140 million and the number of deaths is about 3 million (26). In Turkey, the current number of cases is approximately 4 million and the number of deaths about 35,000 (27). Due to the inability to control the pandemic, these numbers are increasing even more. These high number of cases show the fatality and severity of the pandemic as a global health problem. On the other hand, the psychosocial problems experienced by COVID-19 survivors are also increasing. According to official data in our country, 49% of COVID-19 cases are women and 51% are men (39). Studies conducted in China and Italy have also found that COVID-19 cases are more common in men (40, 41). However, no study has been found in the literature demonstrating that statistically significant relationship between the gender factor and COVID-19.

Contrary to these results, in our study, COVID-19 cases was found more common in female (54.9%). On the other hand, percentage of female was also higher in participants (53.3%) who have not COVID-19. There was no relationship between gender and COVID-19. Another important result of study was that COVID-19 cases were found to be significantly lower in people who are married and have a regular income. This result was interpreted as a regular personal and business life style could be more protective for COVID-19.

There are studies reporting that generalized anxiety levels are high in the general population due to COVID-19 outbreak (6, 28). Consistent with these results, also in our study generalized anxiety levels were found to be high. Especially in COVID-19 survivors, anxiety levels were found to be higher. In addition, the severity of anxiety symptoms was higher also in this group. A significant relationship has been found between COVID-19 disease and generalized anxiety. This result was interpreted as the psychosocial and economic problems experienced due to COVID-19, caused anxiety in people's private and social life.

Post-traumatic stress symptoms are manifested with ‘avoidance’ (the tendency to avoid thoughts or reminders about the event), ‘intrusion’ (difficulty in staying asleep, dissociative experiencing, similar to flashbacks) and ‘hyperarousal’ (irritated feeling, angry, difficulty in sleep onset) (18). Studies conducted during the COVID-19 pandemic found that PTSS increased (8, 29, 30). Additionally, in other study, PTSS were reported to be higher in COVID-19 patients (5). PTSS were found to be higher in the both groups in our study. On the other hand, there was no significant difference between the groups. This result indicate that people who have not had COVID-19 experienced post-traumatic stress as much as COVID-19 survivors. Furthermore, it was found that ‘hyperarousal’ was higher in COVID-19 survivors. This result may be due to increased irritability in COVID-19 survivors due to the negative psychological effects experienced during the illness.

Coronavirus anxiety refers to the dysfunctional anxiety associated with the COVID-19 outbreak (9). In a study conducted in normal population, the rate of coronavirus anxiety was found to be 54.8% and in a study conducted with a group of healthcare workers consisting of nurses, it was found to be 37.8% (31, 32). In our study, the rates of coronavirus anxiety were found to be 21.2% in COVID-19 survivors and 34.5% in people who have not had COVID-19. The corona anxiety, which we expect to be higher in COVID-19 survivors, but lower in our results, may be the thought that they are immune to the disease and therefore will not have COVID-19.

Studies have shown that there is a positive relationship between stress caused by the COVID-19 pandemic and psychological disorders (33, 34). The ability to cope with stress effectively can be defined as reducing or eliminating psychological distress associated with stressors (11). It has been found that individuals who can
effectively cope with stress use active/effective coping styles more (14). There are studies in which positive relationships have been found between passive/ineffective coping style and psychopathology (35, 36). In our study, it was found that COVID-19 survivors more used 'seeking of social support' from effective coping styles, and 'helpless' style from ineffective coping styles, compared to people who have not COVID-19. This result was evaluated as the COVID-19 survivors had personal difficulties in coping with stress, experienced helplessness and preferred social support to cope with problems.

During COVID-19 outbreak, governments of many countries implemented several preventive restrictions to controlling the spread of the infection, including careful infection control, contact tracing, social distancing, isolation, confinement and quarantine. The quality of life of people has affected due to the negative psychosocial and economic consequences caused by these restrictions. In limited studies during current outbreak, it has been found that the COVID-19 pandemic has influenced the QOL of individuals in various aspects (37, 38). In the study, the QOL levels of the participants were found to be low in all domains. Furthermore, COVID-19 survivors had poorer QOL, particularly in the social relationships and environmental-TR domains. Additionally, COVID-19 survivors had lower scores in the items of self-perception of overall QOL and self-perception overall health. This result can be evaluated as the result of the decrease in social and environmental interaction between people due to the restrictions related to the pandemic.

In the study it was evaluated that the relationship between corona anxiety, generalized anxiety and post-traumatic stress factors, which assessed separately and in detail in the study groups, a negative relationship was found between generalized anxiety and corona anxiety in both groups. This was a conclusion consistent with our findings, that is COVID-19 survivors had higher level of generalized anxiety and lower level of corona anxiety, while those who have not had COVID-19 had higher level of corona anxiety and lower level of generalized anxiety. This result was interpreted as corona anxiety is a specific anxiety and it is perceived in a different pattern from generalized anxiety. On the other hand, a positive relationship was found between post-traumatic stress with corona anxiety and generalized anxiety. This result can be evaluated as a reflection of the positive interaction between anxiety and stress factors.

This study had some limitations. First, because of the cross-sectional design of our study, the results shown the psychological impact within limited period of pandemic. The extent of these psychological impacts can be revealed more clearly with a longitudinal study. Second, because the study was conducted at a single center and in limited population, therefore the power of the study was lower. The results of a multi-center study with a larger samples will reflect the general population at a higher rate. Third, due to the design of the study, the temporal variation of psychosocial effects could not be evaluated. Studies in prospective or case-control design will reduce this limitation. Despite some limitations, our study is one of the limited studies in the literature and our findings will provide useful information for future study.

The COVID-19 pandemic has caused serious threats to people's physical and mental health. Considering that the pandemic is still uncontrollable and the number of cases is increasing every day. The number of COVID-19 survivors, suffering from the psychosocial impacts of the pandemic, will increase even more. In parallel with this, in the study was found that COVID-19 survivors had higher levels of anxiety and stress and lower QOL. Having effective coping strategies for stressful events can prevent experiences that lead to possible psychiatric disorders. The results in our study show that people need more competence in coping with stress.
Another important result of our study is that COVID-19 survivors need more social and environmental support. Our findings can be used to construct a psychosocial intervention directed toward COVID-19 survivors and to implement public mental health strategies. Psychosocial support and guidance services should be provided in cooperation with health administrators, public health officials, psychiatrists, psychologists, social workers, psychological support units and social support teams.

**Declarations**

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**Informed Consent:** Informed consent was obtained from the individuals who participated in this study.

**Conflict of Interest:** The authors have no conflict of interest to declare.

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Tables

Table.1 Comparison of sociodemographic characteristics between the groups

|                                | COVID-19 Survivors (n)(%) | Have not had COVID-19 (n)(%) | χ²  | p    |
|--------------------------------|---------------------------|------------------------------|------|------|
| Gender                         |                           |                              |      |      |
| male                           | 51 (%45.5)                | 50 (%46.7)                   | 0.056| 0.812|
| female                        | 62 (%54.5)                | 57 (%53.3)                   |      |      |
| Marital status                 |                           |                              |      |      |
| married                       | 65 (%57.5)                | 77 (%71.9)                   | 12.421| 0.001|
| single                        | 48 (%42.5)                | 30 (%28.1)                   |      |      |
| Have Regular Income            |                           |                              |      |      |
| yes                           | 42 (%37.2)                | 52 (%57.9)                   | 9.517| 0.002|
| no                            | 71 (%62.8)                | 45 (%42.1)                   |      |      |
| Graduated from University      |                           |                              |      |      |
| yes                           | 44 (%38.9)                | 38 (%35.5)                   | 0.276| 0.600|
| no                            | 69 (%61.1)                | 62 (%64.5)                   |      |      |
| Living Alone at Home           |                           |                              |      |      |
| yes                           | 39 (%34.5)                | 28 (%28.1)                   | 1.071| 0.301|
| no                            | 74 (%65.5)                | 71 (%71.9)                   |      |      |
| History of Psychiatric Disease|                           |                              |      |      |
| yes                           | 44 (%38.9)                | 49 (%49.5)                   | 2.503| 0.114|
| no                            | 69 (%61.1)                | 50 (%50.5)                   |      |      |
| Have Chronical Illness         |                           |                              |      |      |
| yes                           | 55 (%48.4)                | 41 (%41.1)                   | 1.266| 0.260|
| no                            | 58 (%51.6)                | 59 (%58.9)                   |      |      |
Table. 2: Comparison of the total mean scores of the IES-R, CAS, CSS, WHOQOL-BREF-TR and GAD-Scale Scores between the groups

|                        | COVID-19 Survivors | Have not had COVID-19 | t / χ² | I  |
|------------------------|--------------------|-----------------------|--------|----|
| **GAD-7 score (m±sd)** |                    |                       |        |    |
| mild                   | 14,58±3,63         | 11,58±4,02            | 2,5,201| 0,0|
| moderate               |                    |                       |        |    |
| high                   | 45,65±14,79        | 45,54±8,15            | 0,071  | 0,9|
| severe                 |                    |                       |        |    |
| **IES-R total score (m±sd)** |                |                       |        |    |
| intrusion              | 16,05±6,89         | 17,38±4,09            | 1,751  | 0,0|
| avoidance              | 16,64±5,55         | 16,76±4,24            | 0,181  | 0,8|
| hyperarousal           | 13,24±4,59         | 11,39±1,55            | 0,045  | 0,0|
| **CAS score (m±sd)**  | 2,67±2,15          | 4,03±1,99             | 4,871  | 0,0|
| **CSS subscales scores (m±sd)** |                |                       |        |    |
| self-confident         | 1,61±0,62          | 1,54±0,36             | -1,111 | 0,2|
| optimistic             | 1,48±0,60          | 1,53±0,41             | 0,745  | 0,4|
| seeking of social support | 1,87±0,54        | 1,43±0,46             | -6,545 | 0,0|
| helpless               | 1,64±0,34          | 1,48±0,21             | -4,275 | 0,0|
| submissive             | 1,52±0,37          | 1,50±0,32             | -0,545 | 0,5|
| **WHOQOL-BREF-TR domains and items scores (m±sd)** |                |                       |        |    |
| self-perception of overall quality of life | 3,17±1,71        | 3,56±1,73             | 2,951  | 0,0|
| self-perception of overall health | 2,86±1,43        | 3,22±1,36             | 4,562  | 0,0|
| physical health        | 62,57±16,34        | 64,34±18,16           | 1,597  | 0,5|
| psychological health   | 61,76±18,10        | 63,55±17,81           | 1,466  | 0,1|
| social relationships   | 62,66±15,33        | 65,19±1,87            | 2,275  | 0,0|
| environmental-TR       | 59,87±14,63        | 63,79±4,64            | 1,747  | 0,0|

* t: t test, χ²: Chi-square test, m: mean, sd: standard deviation, CSS: coping style scale, GAD-7: generalized anxiety disorder scale, IES-R: impact of event scale-revised, WHOQOL-BREF-TR: world health organization quality of life scale brief form Turkish version, CAS: coronavirus anxiety scale

Table. 3 Relationship between Corona anxiety, Generalized anxiety and Post-traumatic stress among groups
|                          | COVID-19 Survivors | Have not had COVID-19 |
|--------------------------|--------------------|-----------------------|
|                          | r      | p     | r      | p     |
| Generalized anxiety- Corona anxiety | r= -0.486 | p= 0.001 | r= -0.064 | p= 0.013 |
| Corona anxiety- Post-traumatic stress | r= 0.315 | p= 0.001 | r= 0.208 | p= 0.031 |
| Post-traumatic stress- Generalized anxiety | r= 0.473 | p= 0.001 | r= 0.102 | p= 0.036 |

r: Pearson's correlation analysis