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Everything'll be Fine Together! Peer Support in the Pandemic: A Mixed Methods Study

Her Şey Birlikte Güzel Olacak! Pandemide Akran Desteği: Bir Karma Yöntem Çalışması

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ABSTRACT

Objective: This study aims to examine the effects of a peer support program implemented for Health Sciences Faculty students who were isolated due to the COVID-19 pandemic on their levels of loneliness, stigma, and anxiety.

Methods: The study was conducted using a mixed-methods design between September 2020 and February 2022. The quantitative component included a sample of 66 students. Data were collected before and after the peer support program using sociodemographic information form, the UCLA Loneliness Scale, the Stigma Scale, and the Epidemic Anxiety Scale. Descriptive statistics and paired sample t-tests were used for data analysis in group comparisons. In the qualitative component, individual in-depth interviews were conducted with 11 students selected through purposive sampling in a face-to-face setting. The qualitative data were analyzed using thematic analysis, with themes and subthemes identified.

Results: The mean scores of the scales before and after the peer support program were, respectively, 15.18±2.57 and 14.56±2.48 for the UCLA Loneliness Scale, 38.69±11.00 and 35.66±11.47 for the Stigma Scale, and 50.50±13.36 and 46.24±15.69 for the Epidemic Anxiety Scale**.** After the program, there was a statistically significant decrease in the stigma and anxiety levels of the participants with peer support. The study identified two main themes: "Experiences related to the isolation process" and "Coping strategies during the isolation process."

Conclusion: It is recommended to develop global peer support education programs to support students' well-being in disaster situations such as pandemics.

Keywords: Anxiety disorders, COVID-19, nursing students, social isolation

ÖZ

Amaç: Bu çalışma, COVID-19 pandemisi nedeniyle izolasyona alınan Sağlık Bilimleri Fakültesi öğrencileri için uygulanan akran destek programının yalnızlık, damgalanma ve kaygı düzeyleri üzerindeki etkilerini incelemeyi amaçlamaktadır.

Yöntemler: Araştırma, Eylül 2020 ile Şubat 2022 tarihleri arasında karma yöntem deseniyle gerçekleştirilmiştir. Nicel bölümde örneklem 66 öğrenci ile oluşturulmuştur. Veriler, akran desteği programı öncesi ve sonrası sosyodemografik bilgi formu, UCLA Yalnızlık Ölçeği, Stigma Ölçeği ve Salgın Hastalık Kaygı Ölçeği ile toplanmıştır. Verilerin analizinde tanımlayıcı istatistikler ve gruplar arası karşılaştırmalarda eşleştirilmiş örneklem t testi kullanılmıştır. Nitel bölümde ise yüz yüze ortamda, amaçlı örneklem doğrultusunda 11 öğrenci ile bireysel derinlemesine görüşme yapılmıştır. Nitel veriler tematik analiz ile analiz edilerek tema ve alt temalar oluşturulmuştur.

Bulgular: Ölçeklerin akran destek programı öncesi ve sonrası ortalama puanları sırasıyla UCLA Yalnızlık Ölçeği için 15.18±2.57 ve 14.56±2.48, Stigma Ölçeği için 38.69±11.00 ve 35.66±11.47, Salgın Hastalık Kaygı Ölçeği için ise 50.50±13.36 ve 46.24±15.69 olarak bulunmuştur. Program sonrasında akran desteği alan katılımcıların damgalanma ve anksiyete düzeylerinde istatistiksel olarak anlamlı bir azalma tespit edilmiştir. Çalışmada iki ana tema belirlenmiştir: "İzolasyon sürecine ilişkin deneyimler" ve "İzolasyon sürecinde başa çıkma stratejileri."

Sonuç: Pandemi gibi afet durumlarında öğrencilerin iyilik halini desteklemek için küresel akran desteği eğitim programlarının geliştirilmesi önerilmektedir.

Anahtar Kelimeler: Anksiyete, COVID-19, hemşirelik öğrenciler, sosyal izolasyon

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INTRODUCTION

Since the beginning of 2020, the COVID-19 disease has been seen as a public health crisis, and increased levels of stress, fear and anxiety have been observed in individuals during the outbreak and the increasing number of cases.[1] In the COVID-19 epidemic, social isolation has begun to be applied by physically separating people from each other for infection control. Social isolation causes a decrease in social relations, individuals feel trapped and isolated, and loneliness increases.[2] In a study conducted to evaluate the relationship between loneliness and psychological resilience of 109 university students who experienced the COVID-19 pandemic, it was found that students' anxiety about the future and their dissatisfaction with death in their family or close environment increased the feeling of loneliness, and those who wanted to socialize away from the feeling of loneliness.[3] In a study conducted to evaluate the anxiety levels and coping methods among nursing students studying at a college in the Southern District of Israel, it was determined that 13.1% of the students had severe anxiety and 42.8% had a moderate anxiety prevalence. In the same study, it was determined that gender, lack of personal protective equipment and fear of infection were associated with higher anxiety scores, stronger flexibility and humor use were associated with significantly lower anxiety levels, and mental disconnection was associated with higher anxiety levels.[4]

Peer support programs are used as an effective method for all age groups such as decline in academic achievement, peer rejection, exclusion, bullying, loneliness, health problems (epidemic or chronic diseases, genetic disorders), habits (smoking, substance use, etc.), eating disorders, cultural differences, stress, elderly parents, suicide and work-related problems. In the COVID-19 pandemic, peer support program applications, which are established after the recovery of intensive care patients and social and emotional support of health personnel, are included in the literature.[5,6] In the study conducted by Hope et al.[7], was revealed that peer support was provided during the recovery process of intensive care patients, and it provided the improvement of the recovery, helped the patients to understand the health services better, and helped in the management of their recovery expectation. At the same time, when the literature was examined, no study was found in which the effect on symptoms was determined by providing peer support during the isolation process, especially for university students studying in the field of applied health. In this direction, the aim of the study is to examine the effect of the peer support program applied to the students of the Faculty of Health Sciences in the isolation process due to COVID-19 on loneliness, stigma and anxiety levels during the isolation.

AIM

This study aims to examine the effects of a peer support program implemented for Health Sciences Faculty students who were isolated due to the COVID-19 pandemic on their levels of loneliness, stigma, and anxiety.

Research questions

- What are the levels of anxiety, stigma, and loneliness among students in isolation due to COVID-19 before participating in the peer support program?
- What are the levels of anxiety, stigma, and loneliness among students in isolation due to COVID-19 after participating in the peer support program?
- Is there a significant difference in the levels of anxiety, stigma and loneliness in students who are isolated after a peer support program?
- What are the experiences of students in isolation due to COVID-19 regarding the peer support program?

METHODS

Study design

In the research, mixed method design was used with the data obtained from the questionnaires applied to the participants. Quantitative data were obtained through questionnaires, in line with the single-group pre-test / post-test design, and information on students' loneliness, stigma, anxiety level and peer support. Qualitative data were analyzed by conducting individual in-depth interviews in order to analyze student experiences after the program.

The isolation decision of the students was taken according to the examination and PCR test results of the school physician and nurse. The isolation period was communicated to the researcher, who is a member of the COVID-19 team, by message. Students who were given a decision to be isolated, met the inclusion criteria and volunteered to participate in the research were randomly assigned to students who provided peer support in the social communication group. Students who provided peer support informed about the research, obtained consent from students who volunteered to participate in the research, and started the peer support program. During the study, the isolation period of the students varied between 10-14 days. The participant was given peer support throughout the quarantine from the first day of isolation.

Participants

In the quantitative part, students who were studying at a foundation university health sciences faculty in Istanbul between September 2020 and February 2022 and who had a positive COVID-19 PCR test or were admitted to the infirmary due to contact and decided to isolate were

invited to participate in the study (N=124). The sample consisted of 66 participants who met the inclusion criteria and volunteered formed the sample of the study (53.2%). After the quantitative data were collected, the participants who wanted to participate in the qualitative research were contacted and the data (n=11) were collected through individual in-depth interviews. The results of the analysis were reviewed with the participants to confirm that the researcher understood the participants' intent and to increase the reliability of the qualitative research process.

Peer support education program

A peer support training program has been established for students who will provide peer support in order to gain the necessary skills to cope with the isolation process by communicating appropriately with the students who are in contact / positive with COVID-19 during the pandemic process. This program was created by researchers with a PhD in Nursing Education and clinical experience in infection control. The prepared program was examined by two academicians and two clinicians. The content of the program included topics such as the COVID-19 disease, its treatment, infection control measures and prevention, the algorithm applied by the Ministry of Health and the university regarding the follow-up of students in isolation, the psychological effects of the pandemic and coping strategies, communication methods and peer support rules. Lecture, video presentation, use of printed materials such as brochures, flow charts, and question and answer were used as teaching methods. The duration of the training program is three days (total 9 hours (180 minutes / day). Ten students who are third year students of the Department of Nursing, who took the Mental Health and Diseases Nursing course and agreed to participate voluntarily. Continuing the information and support after the training for this purpose, a social communication group consisting of researchers and peer support students was formed.

Data collection

Quantitative Data

In the research, variables such as demographic information, student characteristics, loneliness, stigma and anxiety were evaluated by using questionnaires. These variables were measured at the beginning and end of the isolation in order to collect the quantitative data of the study.

Demographic information and student characteristics were evaluated with the information form created by the researchers.[8,9]

Loneliness was measured with The University of California Los Angeles (UCLA) Loneliness Scale (ULS-8) Short Form. The Turkish adaptation of the scale was made by Doğan et al.[10] The scale consists of 8 items and is graded on a 4-point Likert scale as "Not at all Appropriate", "Not Appropriate", "Appropriate" and "Completely Appropriate". A high total score on the scale is evaluated in a way that suggests loneliness. The Cronbach alpha value of the scale is 0.72.[10]

The tendency to psychological stigma was measured by the Stigma Scale developed by Yaman and Güngör[11] in 2013. The scale consists of 22 items and is graded in a five-point Likert type as “I strongly disagree” and “I totally agree”. The scale has four sub-dimensions as discrimination and exclusion, labeling, psychological health, and prejudice. There is no reverse scored item in the scale. The lowest score that can be obtained from the scale is 22, and the highest score is 110. It can be said that individuals with a score below 55 on the scale have a low tendency to stigmatize, and individuals with a higher score have a high tendency to stigmatize. The Cronbach’s alpha value of the scale is 0.84.[11]

Anxiety was measured with the Epidemic Anxiety Scale. The validity and reliability study of the scale was carried out by Sayar et al.[12] in 2020. The scale consists of 18 items and is graded as “Not at all suitable for me” and “Completely appropriate for me” on a five-point Likert scale. The scale has four sub-dimensions as epidemic, economic, quarantine and social life. The highest score that can be obtained from the entire scale is 90 and the lowest score is 18. In this direction, an increase in the total score of the scale is considered as an increase in epidemic disease anxiety. The Cronbach alpha value of the scale is 0.90.[12]

Qualitative Data

In order to collect qualitative data, after the peer support program, the students were asked “…how did you feel?”, “…….how did you cope?” and “……how did peer support relationship” individual in-depth interviews with 10-item open-ended questions were conducted. It was conducted by researchers trained in how to conduct semi-structured interviews. Individual in-depth interviews lasted approximately 40 minutes. It was explained that their requests regarding this interview (such as interrupting the interview, stopping the video recording, ending the interview) would be taken into account, and the confidentiality of the names of the participants and the data obtained would be ensured. The interviews were held at mutually determined times.

Data analysis

Quantitative Analysis

Statistical analyzes were performed with SPSS 25 (IBM SPSS Corp., Armonk, NY, USA). In the evaluation of the data, descriptive statistical methods (frequency-percentage,

arithmetic mean, standard deviation) and paired samples t test were used for comparisons between groups. Values with *P*< .05 at the 95% confidence interval in all analyzes were considered statistically significant.

Qualitative Analysis

Data from individual in-depth interviews were recorded. These records were transcribed by the researcher in the computer environment. Thematic analysis was performed to systematically group the interview data and themes were created.[8] Thematic analysis was conducted by three experienced researchers who had conducted several qualitative studies.

Ethical consideration

This study was approved by the Yeditepe University Non-Interventional Clinical Research Ethics Committee (Date: 21.06.2021, Number: 202105042). Institutional permission was obtained (14092020). In addition, the participants were informed that participation in the research was voluntary. The data was kept anonymous and used for research purposes only.

RESULTS

The mean age of the students who provided peer support was 22.60±0.69, 100% of them were female and were in the third and fourth year of nursing. The mean age of the students participating in the study was 21.39±1.47 years. Among them, 92.4% were female, 33.3% were in the second grade, and 48.5% were studying in the nursing department. Additionally, 90.9% did not have a chronic disease, 86.4% had a moderate economic status, and 60.6% lived with their families. Furthermore, 18.2% had lost a relative due to COVID-19, and 45.5% did not receive social support outside their family (Table 1).

When examining the students' situation during the isolation process, 65.2% tested positive for COVID-19. During the isolation period, 89.4% lived at home, 50% did not experience any disease-related symptoms, 27.2% reported joint pain and weakness, 18.2% had a cough, 12.1% had a sore throat and nasal congestion, 6.1% experienced a loss of smell and taste, 4.5% had a fever and mouth sores, and only 3% reported symptoms such as a headache (Table 2).

It was observed that 86.4% of the participants did not receive medical support during the isolation process, 18.2% felt anxious and hopeless, 77.3% did not experience any significant problems during the isolation period, and 9.2% faced priority issues related to symptom management and fear of contagion (Table 2).

The mean score of the students on the UCLA Loneliness Scale was 15.18±2.57 before the peer support program and 14.56±2.48 after the program. There was no statistically significant difference between the UCLA Loneliness Scale scores measured before and after the program (t=1.882; *P*=.064) (Table 3).

Before the peer support program, the students' total score on the Stigma Scale was 38.69±11.00. The sub-dimensions were as follows: discrimination and exclusion 7.18±2.89, labeling 9.33±3.50, psychological health 8.43±3.35, and prejudice 13.74±4.01. After the program, the students' total score on the Stigma Scale was 35.66±11.47, with the following sub-dimensions: discrimination and exclusion 7.12±2.36, labeling 8.80±3.83, psychological health 7.62±3.18, and prejudice 12.12±3.95. A statistically significant difference was found in the total Stigma Scale score (t=2.009; *P*=.049) and the sub-dimension of prejudice (t=3.464; *P*=.001) between the measurements taken before and after the program (Table 3).

Table 1. Distribution of students' sociodemographic characteristics (n=66)

Sociodemographic Characteristics		n	%
Age (Mean ± SD)	21.39±1.47		
Gender	Female	61	92.4
	Male	5	7.6
Academic year	First Grade	14	21.2
	Second Grade	22	33.3
	Third Grade	18	27.3
	Fourth Grade	12	18.2
Department	Nursing	32	48.5
	Nutrition and Dietetics	16	24.2
	Physical therapy and rehabilitation	18	27.3
The state of having a chronic illness	Yes	6	9.1
	No	60	90.9
Economic state	Low	5	7.6
	Middle	57	86.4
	High	4	6.1
Residence	With family	40	60.6
	Dormitory	7	10.6
	Alone	8	12.1
	With friend	11	16.7
The state of having a chronic disease in the person with whom share the house	Yes	21	31.8
	No	45	68.2
Losing a relative due to COVID-19	Yes	12	18.2
	No	54	81.8
Frequency of communication with family	Rarely	20	30.3
	Often	28	42.4
	Always	18	27.3
Existence of social support outside the family	Yes	36	54.5
	No	30	45.5

SD;Standard deviation

Table 2. The situation of students in the isolation process (n=66)

Interview form		n	%
Reason for isolation	COVID-19 positive	43	65.2
	Contacted	23	34.8
Place of residence during isolation	Home	59	89.4
	Dormitory	7	10.6
Presence of symptoms during isolation	Joint pain and fatigue*	18	27.2
	Cough*	12	18.2
	Sore throat and nasal congestion*	8	12.1
	Loss of smell and taste*	4	6.1
	Fever and mouth sore*	3	4.5
	Headache*	2	3
	No symptoms experienced	33	50
Status of receiving medical support	Yes	9	13.6
	No	57	86.4
Mood during isolation	Comfortable	27	40.9
	Anxious-hopeless	12	18.2
	Tired	27	40.9
Problems in the isolation	Symptom management*	6	9.2
	Quarantine period and fear of contagion*	6	9.2
	No problem occurred	51	77.3

* More than one option ticked

Before the peer support program, the mean total score on the Epidemic Anxiety Scale was 50.50±13.36, with the following sub-dimensions: epidemic 15.74±5.61, economic 5.22±1.89, quarantine 13.19±3.92, and social life 16.33±4.86. After the program, the mean total score on the Epidemic Anxiety Scale was 46.24±15.69, and the sub-dimensions were as follows: epidemic 13.31±6.57, economic 5.50±2.38, quarantine 12.31±4.97, and social life 15.10±5.16. A statistically significant difference was found in the Epidemic Anxiety Scale (t=2.837; *P*=.006), and the sub-dimensions of epidemic (t=4.344; *P*<.001) and social life (t=2.107; *P*=.039) measurements taken before and after the program (Table 3).

In the qualitative part, two main themes and six sub-themes were formed as a result of the content analysis of the individual in-depth interviews with the students. The first main theme, "Experiences Related to the Isolation Process", was examined under three sub-themes: "Experiences with COVID-19", "Psychological Experiences", and "Experiences Related to the Educational Process". The second main theme, "Coping Strategies During the Isolation Process", was examined under three sub-themes: "Social Support", "Family Support", and "Peer Support" (Table 4).

Table 3. Comparison of the loneliness, stigma and epidemic anxiety scale mean scores of students before and after the peer support program (n=66)

Measurements	Before the Peer Support Program (Mean±SD)	After the Peer Support Program (Mean±SD)	Test value	*P***
UCLA Loneliness Scale	15.18±2.57	14.56±2.48	1.882*	.064
Stigma Scale	38.69±11.00	35.66±11.47	2.009*	**.049****
Discrimination and exclusion	7.18±2.89	7.12±2.36	.133*	.894
Labeling	9.33±3.50	8.80±3.83	1.117*	.268
Psychological health	8.43±3.35	7.62±3.18	1.989*	.051
Prejudice	13.74±4.01	12.12±3.95	3.464*	**.001****
Epidemic Anxiety Scale	50.50±13.36	46.24±15.69	2.837*	**.006****
Epidemic	15.74±5.61	13.31±6.57	4.344*	**<.001****
Economic	5.22±1.89	5.50±2.38	-.991*	.325
Quarantine	13.19±3.92	12.31±4.97	1.475*	.145
Social life	16.33±4.86	15.10±5.16	2.107*	**.039****

*Paired samples t test **P<.05, SD; Standard deviation

DISCUSSION

This study aimed to examine the effects of the peer support program applied to students in isolation due to COVID-19 on their loneliness, stigma and anxiety levels. The findings showed that the peer support program reduced the stigma and anxiety levels of the students, they received support during the illness-related processes in isolation due to COVID-19, and improved their coping attitudes and skills in this process. In addition, the peer support program increased their satisfaction with the education process. The results are discussed under two main themes.

Experiences with the isolation process

In the literature, the signs and symptoms that occur in the long term due to COVID-19; fatigue[13,14], shortness of breath[15], chest pain[14], joint and muscle pain[16], insomnia[17]. In the study, it was determined that most of the students were isolated due to COVID-19 positive, they lived at home during the isolation period, they did not experience any symptoms related to the disease, and those who did generally experienced joint pain and fatigue.

In related studies, it has been stated that many people are afraid of contracting the disease of COVID-19. It has been observed that this fear is related to being infected or infecting others.[18] Cervin et al.[19] in his study with young people without anxiety disorders and psychiatric disorders, it was stated that those who are afraid of getting sick think that they may constantly be contagious, and as a result, they often go to the doctor or use their own medication. It

Table 4. Analysis of individual in-depth interviews after the peer support program of the students (n=11)

Themes	Subthemes	Example of description
Experiences related to the isolation process	**Experiences with COVID-19**	"…..Since I have never faced such an event before, it felt like a very difficult and never-ending process. We never went out as a family because we were very scared when it first came out. We got caught though. My brother and I have been through a lot. Our fever was high for 3 days and the bone pains got worse. We tried not to use any other medication other than painkillers. Later, it infected our parents as well. It was very difficult to go through such an illness as a family and to see my family in this way." (Participant 6) "…..Two days after me, my mother and brother also tested positive. It was very sad and difficult to see my family suffer. I blamed myself for their suffering." (Participant 9)
	Psychological experiences	"…..Even though I was in contact, I had to stay at home. So I felt left out and alone. I was very happy when the isolation was over." (Participant 2) "….. At the end of the process, I was very afraid that people would react when I returned." (Participant 5) "…..We went to our nursing internships during the covid period, and at the end, it was canceled when the cases increased. In this process, my friends were staying away from me because they were afraid of me because I was working at the hospital. I was trying to isolate myself so that if it got into me, it wouldn't infect my family. This made me very sad. During the period when Covid 19 was positive, staying at home for 2 weeks was very depressing. I missed walking outside, and sometimes I was crying with anger. It was a process where I was very worn out psychologically." (Participant 6) "…..My positivity period coincided with my full intern internship. Since I have been in contact with many patients, I wonder if I infected my patients, the fear made me very sad." (Participant 9)
	Experiences related to the educational process	"…..I was very worried about how we will take the exams, how this process will go." (Participant 1) "…..Because I was positive, I would not be able to attend the classes, I was afraid of being behind and incomplete in the subjects and not being successful in the exams. I was very worried about the prolongation of this process and not knowing when I would turn negative." (Participant 7)
Coping strategies during the isolation process	**Social support**	"…..My friends were with me during this process and they reduced my anxiety level." (Participant 3) "….. Our social life has been severely restricted. I think the addiction to social media has increased even more. Because people had to provide communication and interaction in this way. I also tried to keep in touch with my friends and relatives over the phone on social media as much as possible." (Participant 6)
	Family support	"…..My family was also COVID positive. We got through this process well by keeping in touch with each other." (Participant 3) "…..I think I am lucky. My family was with me during my illness. They did their best to make me not feel alone psychologically. We caught a tighter bond because we are all at home all the time. If I had lived alone, I'm sure I would have gotten through this process more difficult. Basically, I had very little energy in activities such as cooking and cleaning. But since my family was with me, I did not have much difficulty." (Participant 6)
	Peer support	"…..We didn't just talk about the disease, we also discussed lessons, exams, study methods. My peer counselor told me about study methods, and it helped me calm down." (Participant 1) "…..My peer counselor made me feel like I wasn't alone by asking about my daily situation. It relieved my concerns about school and internship absenteeism. It made me feel better." (Participant 3) "…..My peer counselor often asked me how I was doing. She constantly questioned how I was feeling and whether I needed anything. Apart from that, we talked about my general lifestyle, my psychological state, how I was affected not only by the disease but also by other events in life. She also gave advice on study methods. It was very good for me to talk, to be in communication, to feel that I don't care. I was very satisfied." (Participant 6) "…..I was able to get rid of some of my worries thanks to the support of my peer counselor. The fact that my counselor gave examples from his experiences made me realize that I am not the only one who has experienced this situation and I did not feel alone." (Participant 7) "…..The support I received at that time was very productive for me. Because we were put in isolation for the first time, and we did not know how the process would work. My peer counselor called me every day and explained the process and helped me to overcome this process in the easiest way. Of course, he is also a student. I won't forget your help with the lesson." (Participant 8) "…..It felt good to have friends looking for me and asking me to distract me from these sick thoughts for a bit." (Participant 9)

has also been reported that the fear of COVID-19 negatively affects individuals' stress levels and life satisfaction, and that the fear of contamination can adversely impact daily life by triggering obsessive-compulsive symptoms.[20] In the study, it was seen that the participants had the most primary problems related to symptom management and fear of contagion, and they received peer support on these issues.

Coping strategies during the isolation

Mandatory isolation measures brought by the COVID-19 pandemic can lead to difficulties in socialization, peer communication and establishing meaningful relationships, which are very important in early adulthood according to personality development theories. Peer support programs are seen as a basic healing service for people with mental health problems worldwide, especially during the pandemic period, especially in problems such as loneliness, stigma and anxiety and can be applied as a patient-centered approach in some primary care settings.[21]

Loneliness, which is a negative subjective experience that occurs when an individual perceives that social relationships and interactions are inadequate, emerges as a potential consequence of the mandatory state-imposed quarantine to limit the spread of COVID-19.[22] In the COVID-19 pandemic, loneliness is higher among young people compared to older adults.[23] In the literature, it has been stated that at least 38-50% of young people between the ages of 18-24 experience high levels of loneliness during mandatory quarantine[22] and that women are more likely to experience loneliness than men.[24] In addition, it has been shown that the feeling of loneliness is higher among university students, especially after the mandatory quarantine measures applied during the pandemic.[24] The research showed that peer support had no effect on the loneliness level of the participants. It can be thought that this situation is since most of the students live with their family or friend, and the feeling of loneliness is less. As a matter of fact, the loneliness levels of the students were found to be below the average before and after the program.

Another problem brought by the COVID-19 pandemic is the stigma applied to individuals who are sick or suspicious. Stigma causes anxiety, fear, lowers self-esteem and impairs the quality of life of stigmatized people.[25] It is observed that individuals quarantined at home often experience negative emotions such as anxiety and depression, avoidance of seeking medical help, and social phobia due to feelings of guilt towards family members or other people. It has been stated that peer support programs used to prevent the spread of attitudes and behaviors related to stigma were provided especially through social media during the COVID-19 pandemic, but they were not sufficient.[26] Tasdelen et al.[27], it was reported that support from friends and family members is effective in coping with depression, stress, and anxiety. The findings of our study are in parallel with the literature and show that the peer support program reduces stigma and prejudice. Peer support is thought to be an effective model for developing strategies to cope with negative emotions and being a role model.

It is known that physical distance and isolation measures and restrictions applied due to the COVID-19 pandemic significantly threaten the mental health of individuals.[28] This leads to consequences such as stress, anxiety and alienation from peers among people.[29] In a study conducted in the USA, it was stated that the anxiety and worry that increased in the first stage of the epidemic increased three times more in the later stages of the epidemic compared to the previous period.[30] In another similar study in the literature, it was revealed that the level of anxiety about the COVID-19 pandemic was high.[31] Therefore, the management of the anxiety caused by the isolation measures taken during the pandemic period has an important place. The American Psychological Association stated that anxiety can be reduced by creating a sense of normalcy and this can be achieved through social networks.[32] The literature states that peer support functions as a social network and contributes to improvements in self-esteem, anxiety, depression, stress, burnout, loneliness, and overall mental health.[33] The results of our study showed that peer support reduces anxiety about epidemic diseases in the COVID-19 pandemic. Especially after peer support, a statistically significant difference was found in the epidemic and social life measurements, which are sub-dimensions of the epidemic anxiety scale.

The COVID-19 pandemic has also deeply impacted students' educational processes and psychosocial well-being, with increased levels of anxiety and stress due to isolation and uncertainty.[34] In this context, the peer support program implemented has reduced students' levels of stigma and anxiety, and positively influenced their satisfaction with the educational process. Findings in the literature indicate that peer support enhances motivation in learning processes and supports academic success, which aligns with the results of this study.[35] Within the program, the guidance and support provided by peer counselors have alleviated students' concerns about lessons, exams, and study methods, enabling them to work in a more organized and motivated manner. This has contributed to an improvement in both their psychological well-being and educational satisfaction. The multifaceted benefits of peer support highlight its role as an essential

tool in promoting more effective student participation in education during crisis periods such as the pandemic. These findings emphasize the importance of integrating social support interventions into educational programs and provide effective strategies for similar situations in the future.

Limitations

The fact that the research was conducted during the COVID-19 period, which is a specific time period, limits the comparability of the results with the results in different periods due to the variability of the conditions during the pandemic period. Another limitation of the study is that the sample size is limited and that it is based on data from only one institution. This indicates that the findings may be specific to students at this institution and may limit their generalizability. Studies conducted in different educational institutions and different disciplines may reveal different results.

Research findings show that students who are taken into isolation have the most problems in coping with the disease; revealed that stigma and anxiety decreased with the peer support program and provided support in the treatment and education processes. It is important to implement support tools to help mitigate the harmful effects of the fight against the COVID-19 pandemic and maintain student well-being. In this context, it is recommended to use the peer support program as a valid and reliable model when there is a crisis period affecting large masses.

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