Evaluation of depression, anxiety, stress, and decision regret in kidney transplant recipients

Article *in* The Annals of Clinical and Analytical Medicine · March 2023

DOI: 10.4328/ACAM.21618

2 authors, including:

Naile Akıncı
Fenerbahçe University
11 PUBLICATIONS **5** CITATIONS

SEE PROFILE

Annals of Clinical and Analytical Medicine
Original Research

Evaluation of depression, anxiety, stress, and decision regret in kidney transplant recipients

Depression, anxiety, stress, and decision regret in kidney transplantation

Serkan Akinci[1], Naile Akinci[2]
[1] Department of Urology, Memorial Bahcelievler Hospital
[2] Department of Nursing, Faculty of Health Sciences, Fenerbahce University, Istanbul, Turkey

Abstract
Aim: This study aimed to evaluate decision regret, depression, anxiety, and stress scores in patients after kidney transplantation as well as the effects of patient characteristics on these variables.
Material and Methods: This descriptive study enrolled 340 individuals who underwent kidney transplantation in a private hospital in Istanbul between January 2017 and February 2021. The study sample comprised 302 individuals who volunteered to participate in the study and met the inclusion criteria. The Patient Information Form, Depression, Anxiety, and Stress Scale (DASS 21), and Decision Regret Scale were used as data collection tools.
Results: Mean depression, anxiety, stress, and decision regret scores were 2.454 ± 3.427, 2.589 ± 2.881, 1.825 ± 2.073, and 18.311 ± 20.123, respectively. Notably, these scores increased with an increase in age, and they were higher in single individuals, unemployed patients, nonbelievers, and those with chronic renal failure for a longer duration. Furthermore, depression, anxiety, and stress scores increased with increasing time after transplantation. In the present study, depression, stress, anxiety, and decision regret scores were significantly higher in patients who received transplants from their children.
Discussion: The results of this study indicate that certain personal and clinical characteristics of kidney transplant recipients may affect depression, anxiety, stress, and decision regret after translation. Increasing the existing knowledge of such patients can minimize the risk of adverse effects of transplantation, including both somatic and psychological effects.

Keywords
Transplant Recipients, Depression, Anxiety, Stress, Kidney Failure

DOI: 10.4328/ACAM.21618 Received: 2023-01-26 Accepted: 2023-03-02 Published Online: 2023-03-14 Printed: 2023-03-25 Ann Clin Anal Med 2023;14(Suppl 1):S45-50
Corresponding Author: Serkan Akinci, Department of Urology, Memorial Bahcelievler Hospital, 34180, Bahçelievler, Istanbul, Turkey.
E-mail: dr.s.akinci@gmail.com P: +90 212 408 45 45 / +90 530 458 94 32
Corresponding Author ORCID ID: https://orcid.org/0000-0002-5213-5324
This study was approved by the Clinical Research Ethics Committee of Fenerbahçe University (Date: 2020-12-15, No: 2020/46)

Introduction

Kidney transplantation is recognized as the best renal replacement therapy for end-stage renal disease. Moreover, successful kidney transplantation significantly improves the survival and quality of life of such patients [1]. Although it is considered one of the life-saving treatment options for patients with end-stage renal failure, it may negatively affect the psychological, social, and physical well-being of the patient [2, 3]. A previous study reported that depression, anxiety, and stress are common in patients after transplantation; moreover, psychiatric morbidity is high in such patients [4].

According to the latest data from the Turkish Society of Nephrology, until the end of 2020, the number of kidney transplant recipients who were being followed up for functional grafts was 5021 in Turkey; of these, only 21.55% (1121) received cadaveric transplants. This can lead to serious consequences, including psychological, relational, and social changes, for both the patient and their families. Accordingly, kidney transplant recipients may become susceptible to depression and anxiety [5-7].

In the relevant literature, studies on the psychological health of kidney transplant recipients are limited. Although studies involving kidney donors generally report that the donors do not regret their decision, 1%–10% of the donors report feeling pressured, being dissatisfied, or regret about their decision to donate their kidneys and exhibit subsequent changes after kidney donation surgery [5-7]. To the best of our knowledge, no studies in the relevant literature have evaluated decision regret in kidney transplant recipients and the associated factors. Therefore, in this study, we aimed to evaluate depression, anxiety, stress, and decision regret in kidney transplant recipients.

Material and Methods

Purpose and type of research

This descriptive study was conducted to determine decision regret, depression, anxiety, and stress scores after kidney transplantation, as well as the effects of patient characteristics on these variables.

Population and sample of the study

This study enrolled 340 people who underwent kidney transplantation in a private hospital in Istanbul between January 2017 and February 2021, and the sample comprised 302 people who volunteered to participate in the study and met the inclusion criteria.

Inclusion and exclusion criteria

Patients who underwent kidney transplantation, who exhibited no mental or auditory disability that could affect learning for ≥6 months after kidney transplantation, who had no history of psychiatric disorders, who voluntarily agreed to participate in the study, and who had no problems in speaking and understanding Turkish were included in the study. In contrast, those whose donors were lost to follow-up during the study period or were on dialysis, those whose graft was nonfunctional, those who had ≥2 kidney transplants, and cross-transplant patients were excluded from the study.

Data collection tools

The Patient Information Form, Depression, Anxiety, and Stress Scale (DASS 21), and Decision Regret Scale were used as data collection tools in this study.

Patient Information Form

Patient Information Form was developed by the researcher based on the relevant literature. This form comprises nine questions (those related to age, gender, marital status, educational status, employment status, duration of chronic renal failure (CRF), time of kidney transplantation, the identity of the donor, and religious beliefs).

Depression, Anxiety, and Stress Scale (DASS-21)

DASS-21 was developed by Lovibond and Lovibond (available at: https://psycnet.apa.org/doiLanding?doi=10.1037%2Ft01004-000). The scale comprises 21 questions. To measure the dimensions of depression, stress, and anxiety, there are seven questions in each dimension. The Turkish validity–reliability study of this scale was conducted by Yilmaz et al. [8]. Cronbach's alpha coefficients for DASS-21 subscales were as follows: DASS-Depression α = 0.82, DASS-Anxiety α = 0.80, and DASS Stress α = 0.75.

Decision Regret Scale (DRS)

DRS was developed by Brehaut et al. [9]. The Turkish validity-reliability study of the scale was conducted by Çetin (available at: https://docplayer.biz.tr/20399058-Canli-vericiden-karaciger-nakli-sonrasi-vericinin-ruhsal-ve-bedensel-sagliginin-arastirilmasi.html), [10]. In this 5-point Likert-type scale, the items are scored as 1, "Strongly agree"; 2, "Agree"; 3, "Neither agree nor disagree"; 4, "Disagree"; and 5, "Strongly disagree." The scores range between 0 and 100. Higher scores indicate higher levels of decision regret. Notably, Cronbach's alpha coefficient of the Decision Regret Scale was found to be 0.868.

Ethical Considerations

Ethical Aspects of Research

Institutional permission was obtained from the private hospital where the study was conducted, and ethics committee permission was obtained from Fenerbahçe University Clinical Research Ethics Committee on December 15, 2020 (2020/46). This study was conducted in accordance with the principles of the Declaration of Helsinki. Written and verbal consent was obtained from individuals who volunteered to participate in the study.

Statistical analysis

The data obtained in this study were evaluated using SPSS v 22.0 on a computer. Frequency and percentage analyses were used to determine the descriptive characteristics of the participants, and numerical variables were presented as mean and standard deviation. Moreover, kurtosis and skewness values were analyzed to determine whether the research variables were normally distributed. Since the variables exhibited a normal distribution, parametric methods were used to analyze the data.

Relationships between the dimensions determining the scores of the participants were examined using Pearson correlation analyses. Furthermore, T-test, one-way analysis of variance,

and post hoc (Tukey, LSD) analyses were used to examine the differences in scale scores in terms of the descriptive characteristics of the participants.

Ethical Approval

Ethics Committee approval for the study was obtained.

Results

The study sample comprised 302 individuals who volunteered to participate in the study and met the inclusion criteria. Of all participants, 191 (63.2%) were male and 111 (36.8%) were female. A total of 211 (69.9%) participants were single and 91 (30.1%) participants were married. Table 1 shows the descriptive characteristics of the participants and differences in depression, anxiety, stress, and decision regret scores according to the descriptive characteristics.

Table 2 shows mean depression, anxiety, stress and decision regret scores according to clinical features and religious beliefs. Table 3 shows mean depression, anxiety, stress and decision regret scores according to the relationship between donors and recipients.

Figure 1 shows mean depression, anxiety and stress scores. The mean decision regret score was 18.311±20.123.

In correlation analysis, anxiety was significantly correlated with depression (r=0.742, p<0.001). Stress was significantly correlated with depression (r=0.605, p<0.001) and anxiety (r=0.737, p<0.001). Decision regret was significantly correlated with depression (r=0.539, p<0.001), anxiety (r=0.523, p<0.001) and stress (r=0.497, p<0.001).

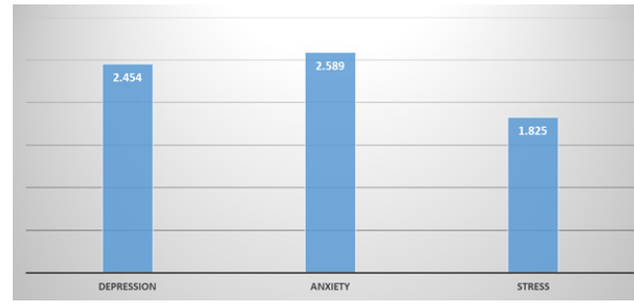

Figure 1. The mean depression, anxiety and stress scores.

Table 1. Depression, anxiety, stress and decision regret scores according to demographic features.

Sociodemographic			Depression	Anxiety	Stress	Decision Regret
Age	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
≤30	57	18,9	2,053±2,635	3,105±3,010	1,667±1,725	13,333±15,478
31-40	63	20,9	2,064±3,167	2,032±2,682	1,571±1,915	13,889±16,300
41-50	83	27,5	1,831±2,962	2,121±2,554	1,554±2,160	18,133±18,963
51-60	68	22,5	3,206±3,791	2,897±3,115	2,088±2,064	23,456±23,297
≥60	31	10,3	4,000±4,754	3,355±3,072	2,774±2,499	25,645±25,844
F=			3,601	2,38	2,627	3,921
p=			0,007	0,052	0,035	0,004
PostHoc=			5>1, 5>2, 4>3, 5>3 (p<0.05)		5>1, 5>2, 5>3 (p<0.05)	4>1, 5>1, 4>2, 5>2 (p<0.05)
Gender	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Male	191	63,2	2,367±3,400	2,607±2,870	1,665±1,969	17,984±20,358
Famale	111	36,8	2,604±3,483	2,559±2,913	2,099±2,224	18,874±19,791
t=			-0,579	0,142	-1,761	-0,37
p=			0,563	0,888	0,09	0,712
Level of education	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Elementary	110	36,4	2,473±2,917	2,746±3,003	1,918±1,987	17,546±20,529
High school	135	44,7	2,578±3,642	2,622±2,891	1,807±2,201	19,482±19,193
University	57	18,9	2,123±3,832	2,211±2,624	1,684±1,947	17,018±21,648
F=			0,354	0,661	0,246	0,424
p=			0,702	0,517	0,782	0,655
Marital status	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Single	211	69,9	2,019±3,055	2,303±2,757	1,645±1,993	16,517±18,742
Married	91	30,1	3,462±4,004	3,253±3,064	2,242±2,203	22,473±22,575
t=			-3,416	-2,654	-2,313	-2,378
p=			0,003	0,008	0,021	0,029
Employed	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
No	138	45,7	2,949±3,727	3,362±3,192	2,261±2,104	21,051±21,457
Yes	164	54,3	2,037±3,103	1,939±2,416	1,457±1,980	16,006±18,685
t=			2,322	4,405	3,414	2,184
p=			0,023	0	0,001	0,03

F: Anova Test; t: Independent Samples T-Test; PostHoc: Tukey, LSD

Table 2. Depression, anxiety, stress and decision regret scores according to clinical features and religious status.

Clinical Feature			Depression	Anxiety	Stress	Decision Regret
Length of diagnosis	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
≤1 Month	44	14,6	2,023±2,654	2,432±2,491	1,523±1,677	16,591±17,246
1-6 Months	90	29,8	2,222±3,483	2,533±2,809	1,933±2,192	15,833±18,516
7-12 Months	22	7,3	1,636±3,017	1,955±2,609	1,000±1,380	15,682±18,211
1-5 Years	101	33,4	2,515±3,230	2,455±3,005	1,762±2,065	17,871±20,620
≥5 Years	45	14,9	3,600±4,345	3,467±3,152	2,444±2,341	27,222±23,682
F=			1,878	1,414	2,229	2,799
p=			0,114	0,229	0,066	0,026
PostHoc=						5>1, 5>2, 5>3, 5>4 (p<0.05)
Length of Kidney Transplantation	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
6 Months-1 Year	100	33,1	1,810±2,744	2,000±2,486	1,260±1,593	18,650±20,023
1-2 Years	112	37,1	2,250±3,298	2,446±2,822	1,545±1,835	15,938±20,790
≥2 Years	90	29,8	3,422±4,039	3,422±3,187	2,800±2,469	20,889±19,250
F=			5,731	6,196	16,172	1,537
p=			0,004	0,002	0	0,217
PostHoc=			3>1, 3>2 (p<0.05)	3>1, 3>2 (p<0.05)	3>1, 3>2 (p<0.05)	
Religious belief	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
No	47	15,6	2,511±3,289	3,255±3,260	2,532±2,483	19,681±24,482
Yes	255	84,4	2,443±3,458	2,467±2,796	1,694±1,966	18,059±19,259
t=			0,124	1,73	2,569	0,507
p=			0,901	0,125	0,033	0,612

F: Anova Test; t: Independent Samples T-Test; PostHoc: Tukey, LSD

Table 3. Depression, anxiety, stress and decision regret scores according to the relationship between donors and recipients.

Relationship between donor and recipient			Depression	Anxiety	Stress	Decision Regret
	n	%	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Parents donate to children	75	24,8	2,227±2,664	2,893±2,860	1,547±1,788	15,467±14,823
Children donate to parents	26	8,6	9,500±3,421	7,462±2,249	4,846±2,509	59,231±18,259
Donation between brothers and sisters	46	15,2	2,283±3,160	2,065±2,225	1,826±2,090	21,848±19,332
Donation between spouses	88	29,1	1,580±2,357	2,000±2,279	1,523±1,742	13,977±13,416
Donation from nephew/niece, uncle, aunt, cousin	32	10,6	1,969±2,706	1,719±2,618	1,344±1,715	13,281±17,162
Donation between friends	24	7,9	0,583±1,442	1,292±2,032	1,292±1,574	5,625±8,250
Cadaver	11	3,6	0,546±1,214	1,273±1,849	1,546±1,572	3,182±7,508
F=			36,03	21,125	12,741	38,539
p=			0	0	0	0
PostHoc=			2>1, 2>3, 2>4, 2>5, 1>6, 2>6, 3>6, 1>7, 2>7, 3>7 (p<0.05)	2>1, 2>3, 1>4, 2>4, 1>5, 2>5, 1>6, 2>6, 1>7, 2>7 (p<0.05)	2>1, 2>3, 2>4, 2>5, 2>6, 2>7 (p<0.05)	2>1, 3>1, 2>3, 2>4, 3>4, 2>5, 3>5, 1>6, 2>6, 3>6, 4>6, 1>7, 2>7, 3>7, 4>7 (p<0.05)

F: Anova Test; t: Independent Samples T-Test; PostHoc: Tukey, LSD

Discussion

In the present study, the mean depression, anxiety, and stress scores were 2.454 ± 3.427, 2.589 ± 2.881, and 1.825 ± 2.073, respectively. Since the highest score that can be obtained from a DASS-21 subdimension is 21, it can be inferred that the depression, anxiety, and stress scores of the individuals participating in the present study were low. This finding may be explained by the fact that transplantation improves the quality of life after the recipient's persistent and exhausting struggle against the disease and that the role of the recipient requires not only tolerance and patience to somatic discomfort, but also overcoming the associated emotional burden from diagnosis to transplantation. Similarly, in the studies by Pawlovski et al. [10] and Czyżewski et al. [11] it was determined that depression, anxiety, and stress scores of patients were low after transplantation. In contrast to the present study, in a previous study by Uyar [3], in 260 transplant recipients, depression, anxiety, and stress scores were slightly above the average, whereas Perveen et al. [12] reported that depression and anxiety were observed in >50% of the included patients. This difference may be attributed to variations in study designs and sample populations.

In the present study, the post-transplant mean decision regret score in kidney transplant recipients was 18.311 ± 20.123 (Min = 0; Max = 95). This result revealed that the participants did not regret their decision at all. To the best of our knowledge, there are no similar studies on recipients in the relevant literature; however, studies involving kidney donors have reported that

donors do not regret their decision after transplantation and that they would make a similar decision if they had to. This result can be explained by the positive recipient-donor relationship, appropriate pre-transplant procedures, no encounter with the risk of rejection after surgery, regular follow-up by the transplantation team, provision of rapid solution to problems occurring during transplantation, and the dialysis period and associated problems coming to an end.

Regarding the analysis of sociodemographic characteristics and depression, anxiety, stress, and decision regret scores, it was observed that the scores increased with an increase in age, whereas there was no change in terms of gender and education level. This finding may be attributed to the increase in the incidence of chronic diseases with age, the difficulty in managing the post-transplant process, and increased burden on caregivers. The depression, anxiety, stress, and decision regret scores of married participants were significantly lower than those of single participants ($p<0.05$). This may be explained by the fact that married people have more support factors; therefore, they can share more burdens of post-transplant difficulties. Regarding employment status, it was found that anxiety, depression, stress, and decision regret scores of unemployed participants were significantly higher than those of employed participants ($p<0.05$). This can be explained by the fact that employed people have social security, are economically independent, productive, and can socialize more in the work environment. In the literature related to the present study, different findings have been reported. Similar to the results of our study, Bingöl et al. [13] found that depression increased with an increase in age. Doğan et al. [14] found that women and self-employed individuals had higher depression, anxiety, or stress scores. These results may be attributed to sociocultural differences and different transplant management approaches. In the present study, decision regret, depression, stress, and anxiety scores increased with the increasing duration of CRF. Furthermore, Demiroğlu and Bülbül [15] found that depression, anxiety, and stress scores increased as the duration of CRF increased.

In the present study, the stress scores of non-believers were higher than those of believers, which may be associated with fatalism.

In the present study, depression, stress, anxiety, and decision regret scores were found to be significantly higher in patients receiving the transplant from their children than in all other groups ($p<0.05$). This can be explained by the concern for the health, future, and safety of one's children in relation to surgery and the cultural perspective that protecting one's child is a parental duty. The second highest level of decision regret was observed in patients who received the transplant from their siblings ($p<0.05$). In contrast, depression, anxiety, stress, and decision regret scores were significantly lower in patients receiving transplants from friends and cadavers than in patients in other groups ($p<0.05$). This result may be attributed to concerns about the health, future, and safety of one's own children related in relation to the surgery. Similarly, another study by Chen et al. [16] found that depression scores were higher in patients who received transplants from their children compared with those in other groups. This finding may be explained by an increase in feelings of guilt as donor-receiver relationship improves.

Correlation analyses between depression, anxiety, stress, and decision regret scores revealed a moderate correlation between depression, anxiety, and decision regret and a weak correlation between stress and decision regret. This can be explained by the fact that both variables are related to the psychological nature of human beings; hence, they may be intertwined processes affecting each other.

Limitations

The study sample comprised only patients who underwent kidney transplantation in a private hospital. Therefore, the results of this study cannot be generalized to all patients.

Conclusion

Based on the results of the study, it is recommended to increase clinicians' awareness of the complex psychosocial issues in kidney transplantation, to psychologically assess both the recipient and donor in the pre-transplant period and to include this as a routine pre-transplant procedure, and to take the necessary measures for the problems encountered. By increasing the current level of knowledge of patients, the risk of adverse effects of transplantation can be minimized, including both somatic and psychological effects.

Scientific Responsibility Statement

The authors declare that they are responsible for the article's scientific content including study design, data collection, analysis and interpretation, writing, some of the main line, or all of the preparation and scientific review of the contents and approval of the final version of the article.

Animal and human rights statement

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. No animal or human studies were carried out by the authors for this article.

Funding: *None*

Conflict of interest

None of the authors received any type of financial support that could be considered potential conflict of interest regarding the manuscript or its submission.

References

1. Abecassis M, Bartlett ST, Collins AJ, Davis CL, Delmonico FL, Friedewald JJ, et al. Kidney transplantation as primary therapy for end-stage renal disease: a National Kidney Foundation/Kidney Disease Outcomes Quality Initiative (NKF/KDOQITM) conference. Clin J Am Soc Nephrol. 2008;3(2):471-80.

2. Liu KL, Chien CH, Hsieh CY, Huang X-Y, Wang H-H, Lin K-J, et al. Effective Decision-Making and Decisional Regret in Living Kidney Donors of Taiwan. Transplant Proc. 2018;50(10):3059-64.

3. Uyar B. The analysis of immunosuppressant therapy adherence, depression, anxiety, and stress in kidney transplant recipients in the post-transplantation period. Transpl Immunol. 2022;75:101686.

4. Grubman-Nowak M, Jeżewska M, Szafran-Dobrowolska J, Ślizień AD, Renke M. Occupational Activity After Renal Transplantation vs Quality of Life, Personality Profile, and Stress Coping Styles. Transplant Proc. 2020;52(8):2423-29.

5. De Pasquale C, Pistorio ML, Veroux M, Indelicato L, Biffa G, Bennardi N, et al. Psychological and Psychopathological Aspects of Kidney Transplantation: A Systematic Review. Front Psychiatry. 2020;11:106.

6. Robiner WN, Petrik ML, Flaherty N, Fossum TA, Freese RL, Nevins TE. Depression, Quantified Medication Adherence, and Quality of Life in Renal Transplant Candidates and Recipients. J Clin Psychol Med Settings. 2022;29(1):168-84.

7. Han Y, Kong Y, Peng S, Wang X. Current Effect of attribution training on early postoperative depression of kidney transplant recipients. Current Psychology. 2022;41:5383–98.

8. Yılmaz Ö, Boz H, Arslan A. Depresyon Anksiyete Stres Ölçeğinin (DASS-21) Türkçe Kısa Formunun Geçerlilik Güvenilirlik Çalışması (The Validity and Reliability Study of the Turkish Short Form of the Depression Anxiety Stress Scale (DASS-21)). Finans Ekonomi ve Sosyal Araştırmalar Dergisi/Journal of Finance, Economics and Social Studies. 2017;2(2):78-91.

9. Brehaut JC, O'Connor AM, Wood TJ, Hack TF, Siminoff L, Gordon E, et al. Validation of a decision regret scale. Med Decis Making. 2003;23(4):281-92.

10. Pawłowski M, Fila-Witecka K, Rymaszewska JE, Łuc M, Kamińska D, Rymaszewska J. Quality of life, depression and anxiety in living donor kidney transplantation. Transplant Rev (Orlando). 2020;34(4):100572.
11. Czyżewski Ł, Frelik P, Wyzgał J, Szarpak Ł. Evaluation of Quality of Life and Severity of Depression, Anxiety, and Stress in Patients After Kidney Transplantation. Transplant Proc. 2018;50(6):1733-37.
12. Perveen N, Batool I, Asghar M, Malik G. Quality of life, psychological stress and death anxiety among liver and renal transplant recipients. Isra Medical Journal [Internet]. 2019;11(2):106–9.
13. Bingöl G, Demir A, Karabek R, Kepenek B, Yıldırım N, Kaytaz EG. Analysing the depression levels of the individuals more than 65 in terms of some variables. Göztepe Medical Journal. 2010;25(4):169-76.
14. Doğan R, Yıldız N, Bağcı N. The Relationship between Depression, Anxiety, Stress Levels and Compliance with Immunosuppressive Therapy in Renal Transplant Patients. Journal of Inonu University Health Services Vocational School. 2022;10(2):539-53.
15. Demiroğlu S, Bülbül E. The Relationship of Patients Receiving Hemodialysis with Depression, Anxiety, Stress Conditions and Dialysis Symptoms. Journal of Nephrology Nursing. 2021; 16(3):124-33.
16. Chen P, Luo Q, Peng L. Anxiety and decreased social support underline poorer quality of life of parent living kidney donors. Asia Pac Psychiatry. 2015;7(2):197-205.

How to cite this article:
Serkan Akinci, Naile Akinci. *Evaluation of depression, anxiety, stress, and decision regret in kidney transplant recipients. Ann Clin Anal Med 2023;14(Suppl 1):S45-50*

This study was approved by the Clinical Research Ethics Committee of Fenerbahçe University (Date: 2020-12-15, No: 2020/46)