



The Relationship Between Body Image Satisfaction and Depressive Symptoms in Living Liver Donors

Canlı Karaciğer Donörlerinde Ameliyat Sonrası Beden İmajı Memnuniyeti ile Depresyon Belirtileri Arasındaki İlişkinin İncelenmesi

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ABSTRACT

Objective: This study aimed to investigate the relationship between body image satisfaction and depressive symptoms in living liver donors.

Methods: This retrospective cross-sectional study was conducted between November 2022, and August 2023. The sample consisted of 92 individuals who had undergone living donor hepatectomy in the past five years at a university hospital, were over 18 years old, had completed at least one-month post-surgery, and voluntarily agreed to participate. Data were collected using a descriptive characteristics form, a body image questionnaire (BIQ-Tr), and a patient health questionnaire-9 (PHQ-9). Statistical analyses included descriptive statistics, Mann-Whitney U test, Kruskal-Wallis, Spearman correlation, and simple linear regression.

Results: The median BIQ-Tr score was 48.00 [interquartile range (IQR): 12.75], and the median PHQ-9 score was 4.00 (IQR: 5.75). There was no statistically significant relationship between BIQ-Tr or PHQ-9 scores and donor characteristics such as gender, marital status, education, employment status, or recipient age and health status ($p>0.05$). A weak negative correlation was found between BIQ-Tr and PHQ-9 scores ($r=-0.279$, $p=0.004$). BIQ-Tr scores negatively and significantly predicted PHQ-9 scores ($\beta=-0.279$, $p=0.007$). Higher body image satisfaction was associated with lower levels of depressive symptoms. Approximately 8% of the variance

ÖZ

Amaç: Bu çalışmada, canlı karaciğer donörlerinde, ameliyat sonrası beden imajı memnuniyeti ile depresyon belirtileri arasındaki ilişkinin incelenmesi amaçlandı.

Yöntemler: Retrospektif kesitsel tipte olan bu araştırma, Kasım 2022 ve Ağustos 2023 tarihleri arasında yürütüldü. Araştırmanın örneklemini, bir üniversite hastanesinde son beş yıl içinde karaciğer nakli için canlı donör olan, 18 yaş üzeri, canlı donör hepatektomi ameliyatından en az bir ay geçmiş, araştırmaya katılmaya gönüllü olan 92 birey oluşturdu. Veri toplanmasında tanıtıcı bilgiler formu, beden imajı anketi (BİA-Tr) ve hasta sağlık anketi-9 (HAS-9) ölçeği kullanıldı. Verilerin analizinde, tanımlayıcı istatistikler, Mann-Whitney U test, Kruskal-Wallis, Spearman korelasyon, basit doğrusal regresyon testi kullanıldı.

Bulgular: Donörlerin BİA-Tr puan medyanı 48,00 [çeyrekler arası açıklık (ÇAA): 12,75], HAS-9 puan medyanı 4,00 (ÇAA: 5,75) bulundu. Donörlerin cinsiyet, medeni durum, eğitim durumu, çalışma durumu, alıcı yaşı, alıcı sağlık durumu ile BİA-Tr ve HAS-9 puanı arasında istatistiksel olarak anlamlı bir ilişki saptanmadı ($p>0,05$). Donörlerin BİA-Tr puanı ile HAS-9 puanı arasında negatif yönlü zayıf düzeyde istatistiksel olarak anlamlı bir ilişki saptandı ($r=-0,279$, $p=0,004$). BİA-Tr puanı, HAS-9 puanını istatistiksel olarak negatif olarak anlamlı biçimde etkiledi ($\beta=-0,279$, $p=0,007$). Vücut imajından duyulan memnuniyetin yüksek olması, depresif belirtilerin daha düşük

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Cite this article as: Öden TN, Gümüş T, Durmuş Ş, Uğuz A, Zeytinli M. The relationship between body image satisfaction and depressive symptoms in living liver donors. Bezmialem Science. 2026;14(4):333-340

Received: 20.10.2025

Accepted: 12.03.2026

Published date: 26.10.2026



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ABSTRACT

in depressive symptoms was accounted for by body image satisfaction ($R^2=0.078$).

Conclusion: Living liver donors had high body image satisfaction and minimal depressive symptoms. Only 6.6% of the donors reported moderate to severe depressive symptoms. Higher body image satisfaction was associated with lower levels of depressive symptoms.

Keywords: Body image, depression, living donors, liver transplantation

Öz

seviyede olmasıyla ilişkilendirildi. Depresif belirtilerdeki varyansın yaklaşık %8'i beden imajından duyulan memnuniyetle açıklanabiliyordu ($R^2=0,078$).

Sonuç: Bu çalışmada karaciğer nakli donörlerinin beden imajı memnuniyeti düzeyleri yüksek, depresyon belirtileri ise minimal düzeyde saptandı. Donörlerin yalnızca %6,6'sında orta şiddetli veya şiddetli düzeyde depresyon belirtisi bulundu. Beden imajı memnuniyeti yüksek olan donörlerin depresyon belirtilerinin düşük olduğu belirlendi.

Anahtar Kelimeler: Beden imajı, depresyon, canlı donörler, karaciğer nakli

Introduction

Liver transplantation is a life-saving treatment for end-stage liver failure. Since organs from deceased donors are not enough to meet the need, liver donation from living donors has become a common alternative (1). Approximately 25% of liver transplants worldwide are performed using living donors, whereas in Türkiye, this rate is around 70% (2,3). According to 2023 data from the Global Observatory on Donation and Transplantation, Türkiye ranks third in the world for living donor liver transplantation (2). At the transplant center where the study was conducted, 56% of liver transplant surgeries are performed using living donors (4).

Body image is a complex concept that integrates an individual's cognitive, perceptual, emotional, and behavioral responses related to their body (5). Body image is a multidimensional construct that encompasses how individuals feel about their bodies, how they perceive their physical appearance, the values and beliefs they hold about their bodies, and the behaviors they engage in to control or manage their body (6). In populations with surgical scars, there is a significant relationship between body image satisfaction and depressive symptoms; however, the magnitude and clinical relevance of this association vary considerably depending on the surgical context. Studies have shown that poorer body image is associated with higher levels of depression across various surgical populations (7-9).

Living liver donors are typically healthy adults who do not require surgical treatment and will not receive any direct medical benefit from the operation. They undergo donor hepatectomy solely on a voluntary basis and must live with a surgical scar in the abdominal area following the procedure (10). This situation may lead to changes in body image after surgery (11). Approximately 42% of living donors may experience changes in body image after surgery, and liver donors have been reported to have lower body image satisfaction compared to kidney donors (12,13).

In recent years, with the increase in living donors in transplantation surgery, patients' body image has gained

greater importance, leading to the adoption of smaller incisions instead of traditional large ones (10,14,15). The literature indicates that donors who undergo minimally invasive surgery report significantly higher levels of body image and satisfaction (16). However, despite their potential benefits, the routine use of minimally invasive techniques in living donor hepatectomy remains limited in many countries (10). In Türkiye, minimally invasive techniques in living donor hepatectomy are applied in a limited number of centers and in selected cases; however, conventional incisions remain the most commonly used approach (17). Although this approach offers many advantages for the surgical team, the abdominal incision may cause mental and psychological stress in donors (16). The surgical scar resulting from living liver donor surgery may affect the donor's post-operative quality of life, overall well-being, and self-confidence (11,18). Depressive symptoms have been reported in approximately 0-34% of patients in the long term after donor surgery (19-22); however, no studies have examined the relationship between depressive symptoms and body image satisfaction.

This study was conducted in Türkiye, where approximately three out of four liver transplants are from living donors, to examine the relationship between postoperative body image satisfaction and depressive symptoms in living liver donors.

Methods**Design and Setting**

This retrospective cross-sectional study was conducted between November 1, 2022, and August 2023 at the organ transplantation department of Ege University Hospital.

Population and Sampling

The study population consisted of 198 individuals who served as living liver donors at the organ transplantation clinic where the study was conducted between October 1, 2017, and 2022 (the past five years before starting the study). The sample size was determined using a priori power analysis conducted with G*Power version 3.1.9.2, based on the effect size reported in the study by Hsu et al.

(23) assuming a 95% confidence level ($\alpha=0.05$), the effect size was set at 0.366, resulting in a minimum required sample size of 91 participants. The study included 92 living liver donors at the specified center over the past five years who underwent donor hepatectomy using the Makuuchi incision (median superior plus right lateral transverse incision), had at least one-month post-hepatectomy, were willing to participate, and had no psychiatric diagnoses.

Data Collection

Data were collected using a data collection form consisting of three sections: a "descriptive characteristics form," "body image questionnaire (BIQ)," and "patient health questionnaire-9 (PHQ-9)".

Descriptive Characteristics Form

The form prepared by the researchers included information on participants' age, gender, occupation, marital status, height, weight, educational level, employment status, and the status of the transplant recipient, among other variables (14,18).

The BIQ

The BIQ was developed by Dunker et al. (24) and has recently been applied in living donor surgeries as well (14,16,25). The BIQ consists of three subscales: body image (5 items, scoring 4 to 20 points), cosmetics (3 items, scoring 3 to 27 points), and self-confidence (2 items, scoring 2 to 20 points). Total scores are calculated for each subscale, with higher scores indicating greater satisfaction with body image. The overall BIQ score ranges from 10 to 67 (19).

Turkish Adaptation of the BIQ (BIQ-Tr)

It is recommended that the sample size for determining the validity and reliability of a measurement tool be five to ten times the number of items in the instrument (26). Since the original BIQ contains 10 items, a sample size of at least 50-100 is recommended to assess its validity and reliability. In this study, the sample size reached 92, which was considered sufficient for validity and reliability evaluation. Details regarding the Turkish adaptation's validity and reliability are as follows:

Language validity

The translation and adaptation process followed the guidelines published by the World Health Organization for instrument translation and validation (27). For the language validity of the instrument, a forward translation was conducted by two healthcare professionals who are native Turkish speakers, proficient in both languages, and familiar with Turkish culture and terminology. The adapted scale was then reviewed by healthcare professionals and a translator. Subsequently, a back-translation was performed by a native English speaker unfamiliar with the original scale. Finally, the two translations were compared to identify any discrepancies.

Content validity

To numerically demonstrate the content validity of the instrument and ensure a reliable evaluation of expert opinions, the Content Validity Index (CVI) was used as the rating criterion (28). For the CVI, evaluations were obtained from three transplant surgeons and three academic nurses. Each expert rated the items on a scale from one to four. Subsequently, the CVI was calculated. A CVI value of at least 0.80 is required to confirm an instrument's content validity (28). In this study, the CVI was found to be 0.93.

Construct validity

Exploratory factor analysis (EFA) was conducted to assess construct validity. Due to correlations among factors, direct oblimin rotation was applied. To determine the suitability of the data, Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure were calculated. KMO values above 0.60 are considered adequate for conducting validity analysis (29). The KMO value in this study was found to be 0.817, indicating the suitability of the instrument for factor analysis. Additionally, Bartlett's test yielded χ^2 (36)=464.261, $p=0.000$, demonstrating sufficient inter-item correlations for EFA. The factor analysis revealed that the 9-item BIQ consists of a three-factor structure—body image, cosmetics, and self-confidence—that together explain 76.404% of the total variance. Accordingly, the BIQ-Tr showed valid construct properties. Specifically, the first factor explained 51.587% of the variance, the second 13.661%, and the third 11.157%. Unlike the original BIQ, one item (do you feel less feminine/masculine due to your surgery?) was removed due to cross-loading on multiple factors. The lowest factor loading was 0.707, exceeding the ideal threshold of 0.40, indicating that all items contributed significantly to their respective factors (29). Appendix 1 presents the distribution of items according to factors and their factor loadings.

Reliability

Cronbach's alpha reliability analysis was conducted to assess the instrument's reliability. The reliability coefficients for the subscales were 0.783 for body image, 0.894 for cosmetics, and 0.629 for self-confidence. The overall reliability coefficient of the BIQ-Tr was 0.824, indicating that it is a reliable measurement tool (30). Validity and reliability assessments confirmed that the BIQ-Tr is a valid and reliable measurement tool. The BIQ-Tr consists of three subscales—body image (items 1-4), cosmetics (items 5-7), and self-confidence (items 8-9)—with a total of 9 items. The total possible score on the questionnaire ranges from 10 to 63.

PHQ-9

The PHQ-9 is a measurement tool that assesses nine symptoms of depression based on DSM-IV criteria. The scale was developed by Kroenke et al. (31) and its Turkish validity and reliability were established by Sari et al. (32).

The scale consists of nine items; each scored from zero (not at all) to three (nearly every day). Based on the total score, depression severity is classified as minimal (1-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe (20-27). The Turkish version of the scale demonstrated a Cronbach's alpha of 0.842 (32). In this study, the scale's Cronbach's alpha was found to be 0.867.

Ethics

Prior to data collection, ethical approval was obtained from the Ege University Medical Research Ethics Committee (approval no: 22-10T/19, date: 06.10.2022) along with written consent from the hospital administration. Prior to participation, all participants were informed about the purpose and procedures of the study, and both written and verbal informed consent was obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Statistical Analysis

Statistical analyses were performed using SPSS version 25.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, the Shapiro-Wilk test for normality, skewness/kurtosis values, Kruskal-Wallis, Mann-Whitney U test, Spearman correlation, and simple linear regression tests were applied. $P < 0.05$ was considered statistically significant.

Results

Descriptive Characteristics

The mean age of living liver donors at the time of data collection was 36.47 ± 8.66 years. Among the participants, 56.5% were male, 39.2% had bachelor's degree, and 66.3% were married. The average body mass index (BMI) was 24.52 ± 3.37 kg/m², with 54.3% falling within the normal range. Regarding employment status, 57.6% worked full-time, and 41.3% were employed in the private sector. Additionally, 69.6% donated their liver to an adult recipient, and 45.7% voluntarily donated to a parent. The recipients of 20.7% of donors had passed away. Notably, 93.5% of donors stated they would donate again if given the chance (Table 1).

Results Regarding the BIQ-Tr Score

The median BIQ-Tr score among donors was 48.00 [interquartile range (IQR): 12.75]. When examining the

Table 1. Donors' descriptive characteristics (n=92)	
Continuous variables	Mean $\pm$ SD (min-max)
Age (year)	36.47 $\pm$ 8.66 (19-58)
Weight (kg)	71.90 $\pm$ 14.40 (45-118)
Height (m)	1.70 $\pm$ 0.09 (1.55-1.93)
BMI (kg/m ²)	24.52 $\pm$ 3.37 (18.08-33.03)
Pre-tx weight (kg)	70.25 $\pm$ 0.09 (47-104)

Table 1. Continued

Continuous variables	Mean $\pm$ SD (min-max)
Categorical variables	n (%)
Gender	
Female	40 (43.5)
Male	52 (56.5)
Educational status	
Primary or below	23 (25.0)
Middle school	12 (13.0)
High school	21 (22.8)
Bachelor's or above	36 (39.2)
BMI (n=90)	
Underweight	2 (2.2)
Healthy weight	50 (54.3)
Overweight	34 (37.0)
Obesity	4 (4.3)
Marital status	
Single	31 (33.7)
Married	61 (66.3)
Employment status	
Public	14 (15.2)
Private	38 (41.3)
Retired	5 (5.4)
Other*	35 (38.1)
Employment type	
Full-time	53 (57.6)
Part-time	8 (8.7)
Unemployed	31 (33.7)
Relationship with recipient	
Parent	42 (45.7)
Sibling	9 (9.8)
Partner	6 (6.5)
Child	20 (21.7)
Other relatives	15 (16.3)
Recipients' age groups	
Adult	64 (69.6)
Child	28 (30.4)
Recipients' health status	
Alive	73 (79.3)
Deceased	19 (20.7)
Willingness to donate again	
Yes	86 (93.5)
No	6 (6.5)

SD: Standard deviation, Min: Minimum, Max: Maximum, BMI: Body mass index, n: Number, %: Percent, Pre-tx: Pretransplantation, under underweight: <18.5kg/m², Healthy weight: 18.5-24.9 kg/m², Overweight: 25.0-29.9 kg/m², Obesity: >30 kg, *: Student, homemaker, farmer etc., Other relatives: Aunt/uncle, cousin/nephew etc.

subscales, the median scores were 15.00 (IQR: 2.00) for body image, 15.00 (IQR: 8.00) for cosmetics, and 20.00 (IQR: 4.75) for self-confidence. No statistically significant relationship was found between the median BIQ-Tr score and donors' age, gender, marital status, educational level, BMI, post-transplant weight gain, employment status, kinship with the recipient, recipient's age at transplant, recipient's current health status, or transplant date ($p>0.05$). A statistically significant relationship was found between the donors' status of being a living donor if they had the chance to decide again and the BIQ-Tr score median ($p<0.001$). Individuals who stated that they would want to be a living donor if they had the chance to decide again had a higher BIQ-Tr score median, while those who stated that they would not want to have a lower BIQ-Tr score median (Table 2).

Results Regarding the PHQ-9 Score

The median PHQ-9 score among donors was 4.00 (IQR: 5.75). No statistically significant relationship was found between the median PHQ-9 score and donors' age, gender, marital status, educational level, BMI, post-transplant weight gain, employment status, kinship with the recipient, recipient's age at transplant, or recipient's current health status ($p>0.05$). Moderately severe to severe depressive symptom scores were observed in 6.6% of donors ($n=6$). A statistically significant relationship was found between the donors' decision to become a living donor if they had the chance to decide again and the PHQ-9 median score ($p=0.005$). Individuals who stated that they would not want to become a living donor if they had the chance to decide

again had higher PHQ-9 scores. Additionally, a weak but statistically significant relationship was found between transplant date and the median PHQ-9 score ($p=0.008$), with donors closer to their transplant date exhibiting lower PHQ-9 scores (Table 2).

Results on the Relationship Between BIQ-Tr and PHQ-9 Scores

A weak negative and statistically significant correlation was found between BIQ-Tr and PHQ-9 scores ($r=-0.279$, $p=0.004$). BIQ-Tr scores negatively and significantly predicted PHQ-9 scores ($\beta=-0.279$, $p=0.007$). Higher body image satisfaction was associated with lower levels of depressive symptoms. Approximately 8% of the variance in depressive symptoms was accounted for by body image satisfaction ($R^2=0.078$) (Table 3).

Discussion

Living liver donors in the present study demonstrated high levels of body image satisfaction and minimal depressive symptoms. Moreover, higher body image satisfaction was associated with lower levels of depressive symptoms.

Previous literature has primarily evaluated donor body image satisfaction in relation to incision type or scar appearance. While most studies have found no significant difference in body image scores between conventional and minimally invasive surgery in living liver donors, donors who underwent minimally invasive procedures reported higher levels of cosmetic satisfaction and self-confidence (14,16,23,25). In this study, cosmetic satisfaction

Table 2. Comparison of donors' descriptive characteristics with BIQ-Tr and PHQ-9 scores ($n=92$)

Variables	BIQ-Tr								PHQ-9	
	Body image		Cosmetic		Self-confidence		BIQ-Tr total		r	p
	r	p	r	p	r	p	r	p		
Age	-0.057	0.588	0.132	0.210	-0.058	0.585	0.063	0.553	-0.031	0.769
BMI	-0.155	0.143	-0.092	0.386	-0.800	0.451	-0.090	0.386	0.104	0.326
Transplant date	0.062	0.561	0.028	0.796	0.062	0.562	0.042	0.692	-0.277	0.008*
	Z	p	Z	p	Z	p	Z	p	Z	p
Post-tx weight gain	-0.708	0.479	-0.688	0.491	-0.092	0.927	-0.590	0.555	-0.807	0.420
Gender	-0.227	0.820	-0.257	0.797	-0.060	0.952	-0.363	0.717	-0.657	0.511
Marital status	-0.004	0.997	-1.650	0.099	-0.242	0.809	-1.026	0.305	-0.963	0.336
Recipients' age groups	-1.904	0.057	-1.848	0.065	-0.124	0.901	-1.232	0.218	-0.124	0.902
Recipients' health status	-1.264	0.206	-0.353	0.724	-0.419	0.675	-0.034	0.973	-0.799	0.424
Willingness to donate again	-3.192	0.001*	-3.356	0.001*	-2.722	0.006*	-3.445	0.001*	-2.780	0.005*
	KW	p	KW	p	KW	p	KW	p	KW	p
Educational status	5.011	0.286	1.388	0.846	1.004	0.909	1.273	0.866	2.603	0.626
Employment status	3.126	0.373	2.438	0.487	5.240	0.155	1.849	0.604	1.052	0.789
Employment type	0.134	0.935	0.662	0.718	1.998	0.368	0.825	0.662	1.658	0.437
Relationship with recipient	8.257	0.220	7.960	0.241	4.556	0.602	6.138	0.408	8.605	0.197

BIQ-Tr: Body image questionnaire (Turkish version), PHQ-9: Patient health questionnaire-9, BMI: Body mass index, Post-tx: Post transplantation, r: Spearman correlation test, Z: Mann-Whitney U test, KW: Kruskal-Wallis test, *: $p<0.05$

Table 3. Association between BIQ-Tr scores and PHQ-9 scores

Variables	R ²	F	B	SE	β	p	95% CI	
							Lower	Upper
BIQ-Tr	0.078	7.615	-0.157	0.057	-0.279	0.007	-0.270	-0.044

BIQ-Tr: Body image questionnaire (Turkish version), R²: R square, F: Overall model significance, B: Unstandardized coefficient; SE: Standard error; β: Standardized coefficient, CI: Confidence interval

scores similar to those reported in previous studies for conventional methods were obtained, while body image and self-confidence levels were found to be comparable to results reported for donors undergoing minimally invasive surgery. Overall body image satisfaction scores were also found to be high. These elevated levels of body image satisfaction suggest that donors associate positive meanings with their donation process. Krause et al. (10) reported that living liver donors perceive their surgical process and scars as symbols of pride, and that these scars represent a sign of satisfaction related to their donation experience. On the other hand, the donor process involves an extensive period of medical preparation and counseling (25). During this process, donors are often motivated by the desire to save the recipient's life, and the donor's motivation to donate can influence their body image satisfaction and self-confidence (16,23). Similarly, in this study, donors who stated they would choose to donate again if given the chance demonstrated significantly higher body image satisfaction.

Although living liver donors understand that transplant surgery can potentially save the recipient's life, the negative impact of hepatectomy on their lifestyle may lead to depressive symptoms (16). In this study, donors generally exhibited minimal depressive symptoms, with only 6.6% showing moderately severe to severe signs of depression. Similarly to the present study, in a meta-analysis by Fan et al. (33) including 18,577 living liver donors, the overall prevalence of depression was reported as 6.3%. Furthermore, this study indicates that depression prevalence is higher during the first three months after donation and gradually declines after one year (33). One of the notable findings of the present study is that donors who were closer in time to the transplant surgery exhibited significantly lower levels of depressive symptoms. This finding is consistent with the observations of Hsu et al. (23) and suggests that, in the early post-donation period, donors may experience positive psychological outcomes driven by the motivation of having saved the recipient's life. On the other hand, depressive symptoms in living liver donors have been reported to be influenced by multiple factors, including personal characteristics (female sex, being unmarried, lower educational level), surgery-related factors (serious postoperative complications), recipient-related factors (poor recipient health status or death, negative donor-recipient relationship), and levels of social support (economic difficulties, difficulty finding employment, and inadequate social support) (28). In

this context, the generally minimal level of depressive symptoms observed in our study may be related to participants' personal characteristics (predominantly male and married) and recipient-related factors (the majority of recipients being alive and clinically stable). In addition, the presence of a standardized and comprehensive living donor evaluation protocol at the study center may have facilitated the selection of psychosocially appropriate donors, thereby contributing to these favorable outcomes (34).

Depression has been associated with lower mental quality of life, reduced life satisfaction, and psychological consequences such as post-donation regret (20,35). In the present study, individuals who stated that they would not choose to be a donor if given the opportunity to decide again exhibited significantly higher levels of depressive symptoms. Furthermore, increasing depressive symptoms were associated with decreased body image satisfaction among donors.

Study Limitations

This study has several strengths and limitations. A key strength is that it is one of the few studies conducted in a language for which the BIQ's validity and reliability have been established. On the other hand, the retrospective design of the study is a notable limitation. Prospective studies on body image satisfaction are recommended for future research. Additionally, the absence of a control group and the cross-sectional nature of the study should be considered when interpreting the findings, as these factors limit causal inferences. Moreover, some potential donors may have withdrawn from the donation process during the medical team's evaluation and screening phases due to information provided about scars and possible body image changes. Another limitation is that the study was conducted at a single-center with a limited sample size, which restricts the generalizability of the findings.

Conclusion

This study found that living liver donors generally exhibit high levels of body image satisfaction and minimal depressive symptoms. Donors with higher body image satisfaction demonstrated lower levels of depressive symptoms. Conversely, donors experiencing regret showed lower perceptions of body image, cosmetic satisfaction, and self-confidence, alongside higher depressive symptomatology. Future research is recommended to investigate the impact of decisional conflict prior to donor hepatectomy on post-transplant body image satisfaction and depression.

Ethics

Ethics Committee Approval: Prior to data collection, ethical approval was obtained from the Ege University Medical Research Ethics Committee (approval no: 22-10T/19, date: 06.10.2022).

Informed Consent: Written consent from the hospital administration.

Acknowledgments

We would like to express our sincere gratitude to Veysel Umman and Halit Batuhan Demir for their invaluable contributions in this study.

This study was presented in oral abstract format at the 16th Turkish Hepato-Pancreato-Biliary (HPB) Surgery Congress and the 7th HPB Surgical Nursing Congress (Antalya, November 9-12, 2023).

Footnotes

Authorship Contributions

Surgical and Medical Practices: T.G., A.U., M.Z., Concept: T.N.Ö., T.G., Ş.D., A.U., M.Z., Design: T.N.Ö., T.G., Data Collection or Processing: T.N.Ö., Ş.D., Analysis or Interpretation: T.N.Ö., T.G., Literature Search: T.N.Ö., T.G., Ş.D., Writing: T.N.Ö., T.G.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

Appendix Link: <https://d2v96fxpocvxx.cloudfront.net/d363ec1e-9e5e-4591-a00a-d656bfcabb80/content-images/926334fe-2c0e-49e2-aff9-a50216b57ed7.pdf>

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