

Exploring quality of life and social impacts in living kidney donors: Insights from tertiary hospitals Saudi Arabia: A 2-year cross-sectional study from 2022 to 2024

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Abstract

Introduction: Chronic kidney disease is a global health challenge, often progressing to end-stage renal disease requiring renal replacement therapies such as dialysis or transplantation. Kidney transplantation is the preferred treatment due to its superior effectiveness in improving survival and quality of life compared to dialysis. In addition, living kidney donation, while generally safe, may impact the donor's psychological and social well-being. The present study investigates the quality of life and social outcomes of living kidney donors, offering important insights into donor experiences in Saudi Arabia.

Methodology: This cross-sectional study was conducted at King Abdulaziz Medical City, Riyadh, and Jeddah, Saudi Arabia, between 2022 and 2024. A total of 224 kidney donors participated, with data collected through telephone interviews using the validated Perceived Donation Consequences Scale to assess psychosocial outcomes, including physical health, quality of life, and social relationships. Demographic data were extracted from electronic medical records.

Results: A total of 224 kidney donors participated in the study. The majority of donors were male (72.8%) and married (66.1%), with 79.9% donating to immediate family members. The study showed that 48.2% reported improved quality of life. Moreover, 90.2% of donors would choose to donate again, and 86.6% would recommend donation to others. While 75.4% of donors reported that the surgery met their expectations, 29% experienced ongoing physical symptoms such as pain and fatigue. Psychosocial outcomes were generally positive, with 78.6% reporting no negative impact on family relationships and 70.1% indicating that their job prospects were unaffected.

Conclusion: This study demonstrates that kidney donation generally leads to high levels of satisfaction and positive psychosocial outcomes for donors. While most donors reported improved quality of life and strong motivation to donate again, a subset experienced ongoing physical symptoms such as pain and fatigue.

Keywords: Donor, quality of life, transplant

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INTRODUCTION

The kidneys eliminate metabolic waste, maintain fluid and electrolyte equilibrium, support bone health, regulate blood pressure, and fulfill other vital functions.^[1]

Chronic kidney disease is characterized by either kidney damage or an estimated glomerular filtration rate below 60 ml/min per 1.73 square meters, lasting for at least 3 months. It entails a gradual decline in kidney function, eventually necessitating renal replacement therapy such as dialysis or transplantation.^[2] In Saudi Arabia, there are upward of 20,000 individuals receiving dialysis treatment, with an additional 9,810 patients undergoing follow-up postkidney transplantation.^[3]

Kidney transplantation stands as the preferred treatment for end-stage renal disease, as it has demonstrated superior effectiveness in prolonging survival and improving quality of life when compared to ongoing dialysis maintenance.^[4] Patients who undergo transplantation often experience a better quality of life and a projected survival benefit of 10 years over those who remain on dialysis.^[5]

A systemic review of 110 studies reveals that kidney transplantation, in comparison to dialysis, leads to significant decreases in mortality and cardiovascular incidents, along with notable enhancements in quality of life. Even with the rise in age and accompanying health conditions among recent transplant recipients, the advantages of transplantation over dialysis appear to be growing over time.^[6] Annually, around 17,600 kidney transplants are conducted in the United States.^[7] Moreover, in 2019, the United States witnessed several kidney transplants, with a total of 24,273 procedures conducted.^[8]

Several studies have demonstrated that living kidney donation does not adversely affect the life expectancy of donors.^[9] Kidney donation has the potential to influence the psychological well-being of donors and impact their relationships. Some donors have reported experiencing depression and disruptions in familial relationships postdonation, and in some cases, even suicide following the death of a recipient.^[10] There have been two documented instances of suicide by kidney donors who were related to the recipients, occurring subsequent to graft rejection and the demise of the recipients.^[11] In addition, there is another documented case of a living renal transplant donor who developed a major depressive disorder and tragically took their own life.^[12]

There are not enough studies about the quality of life and social outcomes after donating a living kidney. To improve

our knowledge, this study aims to study the quality of life and social outcomes after donating a living kidney in King Abdulaziz Medical City Riyadh and Jeddah.

METHODOLOGY

This cross-sectional study was conducted at King Abdulaziz Medical City, Riyadh, and Jeddah, Saudi Arabia, following approval (approval no. NRJ24J-052-02) from the Institutional Review Board of the King Abdullah International Medical Research Center. The primary objective was to assess the quality of life and social outcomes of living kidney donation.

The study utilized the Perceived Donation Consequences Scale, developed by Wirken *et al.*, to evaluate the psychosocial impact of kidney donation on donors' lives, encompassing physical health, psychological well-being, social relationships, quality of life, and decision satisfaction. Each item is typically rated on a Likert scale, ranging from "Strongly Disagree" to "Strongly Agree," allowing for a nuanced understanding of donor experiences. This validated instrument aimed to capture donors' perceptions comprehensively.

Participants included all kidney donors at King Abdulaziz Medical City, Riyadh, and Jeddah, with exclusion criteria excluding patients diagnosed with mood disorders. Demographic data were extracted from electronic medical records, BestCare. A total of 350 kidney donations occurred between 2022 and 2024, and 224 (64%) of them were responsive. The data collection utilized telephone interviews and was conducted within the hospital.

Statistical analysis

Data analysis was performed using IBM SPSS 25 software (IBM Corp., Armonk, NY, USA). Numerical data were reported as mean \pm standard deviation or median (interquartile range), while categorical data were presented as frequency and percentage. Regression analysis was conducted using STATA 15 software (StataCorp LLC, College Station, TX, USA). Statistical significance has been reported at 5% ($P < 0.05$) and 1% ($P < 0.01$).

RESULTS

Table 1 displays the sociodemographic characteristics of study participants. The mean age of the donors was 34.9 years, indicating that most donors are relatively young. Majority of the donors were male (72.8%), while female donors made up (27.2%) of the sample, demonstrating their significant contribution despite being a smaller proportion.

Table 1: Sociodemographic characteristics of study participants

Respondent characteristics	n (%)
Age (n), mean±SD	224 (34.9±8.8)
Gender	
Male	163 (72.8)
Female	61 (27.2)
Marital status	
Married	148 (66.1)
Single	62 (27.7)
Divorced	10 (4.5)
Widow/er	4 (1.8)
Relationship with recipient	
Immediate family	179 (79.9)
Relative	22 (9.8)
Friend	9 (4)
Stranger	14 (6.3)

SD: Standard deviation

In terms of marital status, most donors were married (66.1%), suggesting that familial obligations, particularly to spouses and close family members, likely influenced the decision to donate. A substantial proportion (27.7%) of donors was single, and a smaller percentage of donors were divorced (4.5%) or widowed (1.8%), reflecting a lower representation among these groups.

The relationship between the donors and recipients highlights that a large majority (79.9%) donated to immediate family members, such as parents, siblings, or children, reinforcing the importance of familial bonds in organ donation.

Table 2 illustrates the responses of kidney donors regarding their postdonation experiences. A large proportion (48.2%) of donors strongly agreed that their quality of life improved due to the donation, and 90.2% would choose to donate again. Most donors (75.4%) strongly disagreed that the surgery was worse than expected, although 38.8% still reported experiencing physical symptoms such as pain and fatigue. In terms of relationships, 78.6% of respondents strongly disagreed that their family or partner relationships worsened after the donation. In addition, 86.6% of donors said that they would recommend others to donate a kidney. Concerns about job prospects and performance were minimal, with 70.1% strongly disagreeing that their job opportunities were affected and 74.1% reporting no changes in job performance. Overall, the responses indicate a high level of satisfaction and positive psychosocial outcomes, though some donors still experience lingering physical symptoms.

Table 3 summarizes the key domains of physical, psychological, and job-related experiences postkidney donation. These domains were created following an exploratory factor analysis, using a factor loading 0.5 as the

Table 2: Perceived Donation Consequences Scale

Variables	Response	n (%)
1. My own quality of life has improved due to the donation	Strongly disagree	5 (2.2)
	Disagree	4 (1.8)
	Neutral	75 (33.5)
	Agree	32 (14.3)
2. The response of my spouse and/or children has not been as positive as I had expected	Strongly agree	108 (48.2)
	Strongly disagree	139 (62.1)
	Disagree	13 (5.8)
	Neutral	53 (23.7)
3. The response of relatives to the donation has not been as positive as I had expected	Agree	9 (4)
	Strongly agree	10 (4.5)
	Strongly disagree	169 (75.4)
	Disagree	15 (6.7)
4. If I had to make the choice again, I would certainly choose to donate a kidney	Neutral	26 (11.6)
	Agree	7 (3.1)
	Strongly agree	7 (3.1)
	Strongly disagree	6 (2.7)
5. In retrospect the surgery was worse than anticipated	Disagree	0
	Neutral	4 (1.8)
	Agree	12 (5.4)
	Strongly agree	202 (90.2)
6. I still frequently experience physical symptoms like pain and fatigue due to the donation	Strongly disagree	169 (75.4)
	Disagree	22 (9.8)
	Neutral	17 (7.6)
	Agree	9 (4)
7. My expectations before the donation were realistic	Strongly agree	7 (3.1)
	Strongly disagree	87 (38.8)
	Disagree	15 (6.7)
	Neutral	10 (4.5)
8. Relations within the family/ with my partner have changed for the worse since the donation	Agree	47 (21)
	Strongly agree	65 (29)
	Strongly disagree	15 (6.7)
	Disagree	16 (7.1)
9. I would always recommend others to donate a kidney	Neutral	53 (23.7)
	Agree	41 (18.3)
	Strongly agree	99 (44.2)
	Strongly disagree	176 (78.6)
10. I found it difficult to get the idea that I only have one kidney	Disagree	7 (3.1)
	Neutral	32 (14.3)
	Agree	3 (1.3)
	Strongly agree	6 (2.7)
11. My recovery from surgery took longer than I expected	Strongly agree	2 (0.9)
	Strongly disagree	3 (1.3)
	Disagree	6 (2.7)
	Neutral	19 (8.5)
12. The relationships with family and friends have improved due to the donation	Strongly agree	194 (86.6)
	Strongly disagree	158 (70.5)
	Disagree	24 (10.7)
	Neutral	21 (9.4)
13. I have not been able to resume all my day-to-day routines	Agree	12 (5.4)
	Strongly agree	9 (4)
	Strongly disagree	155 (69.2)
	Disagree	20 (8.9)
14. The surgery was worse than expected	Neutral	20 (8.9)
	Agree	11 (4.9)
	Strongly agree	18 (8)
	Strongly disagree	3 (1.3)
15. My job prospects and performance were minimal	Disagree	2 (0.9)
	Neutral	81 (36.2)
	Agree	26 (11.6)
	Strongly agree	112 (50)
16. I have not been able to resume all my day-to-day routines	Strongly disagree	177 (79)
	Disagree	17 (7.6)
	Neutral	10 (4.5)
	Agree	6 (2.7)
17. I have not been able to resume all my day-to-day routines	Strongly agree	14 (6.3)
	Strongly disagree	14 (6.3)
	Disagree	14 (6.3)
	Neutral	14 (6.3)

Contd...

Table 2: Contd...

Variables	Response	n (%)
14. I still find myself quite preoccupied by the donation	Strongly disagree	72 (32.1)
	Disagree	17 (7.6)
	Neutral	58 (25.9)
	Agree	28 (12.5)
15. The physical effects of the donation were greater than I expected	Strongly agree	49 (21.9)
	Strongly disagree	159 (71)
	Disagree	16 (7.1)
	Neutral	27 (12.1)
16. The concerns I had before the donation proved unfounded	Agree	7 (3.1)
	Strongly agree	15 (6.7)
	Strongly disagree	20 (8.9)
	Disagree	8 (3.6)
17. I am concerned about the performance of my remaining kidney in the future	Neutral	66 (29.5)
	Agree	27 (12.1)
	Strongly agree	103 (46)
	Strongly disagree	133 (59.4)
18. My faith or personal beliefs have been strengthened through the donation	Disagree	20 (8.9)
	Neutral	23 (10.3)
	Agree	25 (11.2)
	Strongly agree	23 (10.3)
19. I am concerned about how the kidney I donated will function in the future	Strongly disagree	7 (3.1)
	Disagree	7 (3.1)
	Neutral	61 (27.2)
	Agree	30 (13.4)
Extra 1. Do you think your chances of getting into a relationship have been affected after donating?	Strongly agree	119 (53.1)
	Strongly disagree	119 (53.1)
	Disagree	20 (8.9)
	Neutral	25 (11.2)
Extra 2. Do you think your chances of getting a job were affected after donating?	Agree	23 (10.3)
	Strongly agree	37 (16.5)
	Strongly disagree	177 (97)
	Disagree	13 (5.8)
Extra 3. Do you think your job performance has been affected after donating?	Neutral	24 (10.7)
	Agree	2 (0.9)
	Strongly agree	8 (3.6)
	Strongly disagree	157 (70.1)
	Disagree	22 (9.8)
	Neutral	26 (11.6)
	Agree	3 (1.3)
	Strongly agree	16 (7.1)
	Strongly disagree	166 (74.1)
	Disagree	22 (9.8)
	Neutral	22 (9.8)
	Agree	8 (3.6)
	Strongly agree	6 (2.7)

cutoff point. The negative physical consequences domain had a low mean score (1.64), indicating that most donors did not experience significant physical complications. Similarly, concerns about renal function were relatively low (mean = 2.16), suggesting minimal anxiety about kidney function postdonation. Family attitude responses were slightly higher, reflecting some concerns about how relatives responded to the donation. On the positive side, the regret/motivation domain showed high mean scores, with (4.79) for recommending donations, highlighting high donor satisfaction and willingness to donate again. Finally, the person and job activities domain showed minimal disruption, with low mean scores indicating that donors generally did not feel their job opportunities or day-to-day routines were significantly impacted. Overall,

these results suggest that kidney donation is well-tolerated, with most donors reporting positive outcomes across various domains.

Table 4 illustrates the regression analysis, which explored the effects of age, gender, marital status, and relationship with the recipient on five domains relating to outcomes following kidney donation: negative physical consequences, renal function, family attitude, regret/motivation, and person and job activities. Across most domains, lower scores indicated better outcomes. The results highlighted that marital status and the relationship with the recipient were significant predictors in several domains, while age and gender had limited influence.

In the domain of negative physical consequences, widowers experienced significantly better outcomes compared to the reference group (likely divorced), with a coefficient of -1.063 ($P < 0.01$). Similarly, immediate family members and strangers reported fewer negative consequences, with coefficients of -1.035 ($P < 0.01$) and -1.192 ($P < 0.01$), respectively. For Renal Function, only those with an immediate family connection showed significantly better outcomes, reflected by a coefficient of -0.817 ($P < 0.05$). In the family attitude domain, widowers and immediate family members again had significantly better attitudes, with coefficients of -1.063 ($P < 0.05$) and -0.855 ($P < 0.01$). Regarding regret/motivation, immediate family members reported higher scores (indicating lower regret or higher motivation) with a coefficient of 0.376 ($P < 0.05$), whereas relatives reported lower scores (coefficient = -1.039 , $P < 0.01$), indicating higher regret. Strangers experienced lower regret and greater motivation with a coefficient of 0.550 ($P < 0.01$).

For person and job activities, age was the only significant factor, where older individuals reported significantly better outcomes, as indicated by a coefficient of -0.016 ($P < 0.05$), suggesting fewer disruptions in personal- and job-related activities after the donation. Overall, the results indicate that immediate family relationships generally correlate with better post-donation experiences, and older age positively influences outcomes in personal and professional activities.

DISCUSSION

In this study, a total of 224 donors met the inclusion criteria, with a mean age of 34.9 years. The sociodemographic characteristics of kidney donors offer valuable insights into the typical profile of donors within this region. The majority were male (72.8%), which aligns with previous research indicating a higher prevalence of male donors,

Table 3: Domain and associated items – summary statistics

	Count	Mean±SD
Negative physical consequences ^a	224	1.64±0.94
In retrospect the surgery was worse than anticipated	224	1.5±1.01
My recovery from surgery took longer than I expected	224	1.74±1.28
The physical effects of the donation were greater than I expected	224	1.67±1.21
Renal function ^b	224	2.16±1.26
I am concerned about the performance of my remaining kidney in the future	224	2.04±1.44
I am concerned about how the kidney I donated will function in the future	224	2.28±1.57
Family attitude ^c	224	1.67±0.99
The response of my spouse and/or children has not been as positive as I had expected	224	1.83±1.18
The response of relatives to the donation has not been as positive as I had expected	224	1.52±1.02
Regret/motivation ^d	224	4.54±0.59
My own quality of life has improved due to the donation	224	4.04±1.05
If I had to make the choice again, I would certainly choose to donate a kidney	224	4.8±0.72
I would always recommend others to donate a kidney	224	4.79±0.64
Person and job activities ^e	224	1.55±0.76
Do you think your chances of getting a job were affected after donating?	224	1.66±1.18
I have not been able to resume all my day to-day routines	224	1.5±1.12
Do you think your job performance have been affected after donating?	224	1.51±0.99

^{a,b,c,e}Lower is better, ^dHigher is better. SD: Standard deviation

Table 4: Regression results

Independent variables	Dependent variables				
	Negative physical consequences	Renal function	Family attitude	Regret/motivation	Person and job activities
Age	0.005 (0.007)	-0.002 (0.011)	0.006 (0.010)	0.000 (0.005)	-0.016* (0.006)
Gender					
Male	-0.130 (0.147)	-0.395 (0.202)	-0.062 (0.147)	0.052 (0.083)	-0.028 (0.113)
Marital status					
Married	-0.188 (0.286)	0.225 (0.347)	-0.295 (0.380)	0.005 (0.162)	0.103 (0.235)
Single	-0.093 (0.303)	0.707 (0.389)	0.212 (0.396)	-0.024 (0.168)	0.282 (0.258)
Divorced			Reference category		
Widower	-1.063** (0.377)	0.112 (0.397)	-1.063* (0.426)	0.167 (0.256)	0.137 (0.478)
Relationship with recipient					
Immediate family	-1.035** (0.309)	-0.817* (0.391)	-0.855** (0.309)	0.376* (0.185)	-0.431 (0.367)
Relative	-0.578 (0.391)	-0.572 (0.510)	-1.039** (0.355)	0.117 (0.263)	-0.374 (0.400)
Friend			Reference category		
Stranger	-1.192** (0.357)	-0.771 (0.469)	0.210 (0.460)	0.550** (0.201)	-0.299 (0.418)
Observations	224	224	224	224	224
R ²	0.083	0.062	0.139	0.040	0.073

*Significant at 5%, **Significant at 1%. Robust SEs in parentheses. SE: Standard error

particularly in Middle Eastern countries. For example, a study conducted in Iran among living kidney donors reported that 82% of donors were male, a trend attributed to cultural and societal norms where men, often seen as the primary family providers, are more inclined to donate to family members.^[13] This pattern may also reflect gender roles in decision-making and altruism related to health, indicating that men are often more likely to assume the responsibility of organ donation within their families. However, the representation of female donors at 27.2%, remains notable and is comparable to findings in other regions where women, although less frequently than men, still make significant contributions to living kidney donations. For instance, in Western countries such as the United States, studies show that women often make up a larger proportion of kidney donors, likely due to different societal structures and the caregiving roles that

women have traditionally taken on.^[14] The marital status of the respondents shows that most participants were married (66.1%), which aligns with research showing that family dynamics and spousal support play a critical role in the decision to donate a kidney.^[15] Married individuals are more likely to feel a responsibility to support their family members or spouses in need, which may explain the high proportion of married donors in this group. The relationship between donors and recipients in this study further shows that 79.9% of donors were immediate family members. This is a key finding and aligns with international patterns, where family members – especially close relatives such as parents, siblings, or children – are the most common living kidney donors.^[16] Research from both Western and non-Western regions highlights the significance of familial bonds in living organ donation. In many instances, family members experience a deeper

emotional connection and a sense of duty to support their loved ones, which can encourage them to proceed with the donation. Notably, only a small percentage of donors were friends (4%) or strangers (6.3%), underscoring the complex dynamics involved in nonfamily donations. Local data from Saudi Arabia also confirm that the majority of kidney donations are predominantly driven by family relationships. One local study found that most respondents expressed a clear preference for donating to a family member rather than to friends or strangers.^[17] In Saudi Arabia, cultural and religious perspectives also play a role in organ donation decisions. While most individuals are aware of the permissibility of organ donation in Islam, concerns about health and the perceived risks associated with donation may contribute to the relatively lower rates of nonfamily donations. In addition, limited exposure to organ donation awareness campaigns could further reduce the likelihood of altruistic donations. In contrast, altruistic donations, in particular, have gained attention in countries such as the United States, where donor registries and awareness campaigns have encouraged individuals to donate to unknown recipients.^[18]

Nearly half (48.2%) of the participants strongly agree that their quality of life has improved postdonation, aligning with other studies where kidney donors report positive life changes and fulfillment from helping others.^[19] 90.2% of participants would choose to donate again, and 86.6% would recommend others to donate, similar high satisfaction rates have been documented globally among living kidney donors. For example, a study conducted in Japan reported that the majority of donors (85.1%) expressed high levels of satisfaction post-donation, with key factors being a good relationship with the recipient and adequate information before the procedure.^[20] This global trend of high donor satisfaction underscores the positive psychosocial outcomes of living kidney donation, particularly when donors receive appropriate care and information. A significant proportion (75.4%) of donors in this study strongly disagreed that the surgery was worse than expected, indicating that their expectations were largely met. However, 29% of participants continued to report ongoing physical symptoms, such as pain and fatigue. As highlighted by a study conducted by Sayaka Kobayashi, while many living donors experience good physical recovery, some endure long-term effects, especially related to pain and fatigue. These persistent symptoms could stem from individual variations in healing, the physical demands of recovery, or pre-existing health conditions that may have been present before surgery.^[20] The persistent physical symptoms may be linked to psychological factors,

such as stress or anxiety, which can manifest as physical complaints such as pain or fatigue postdonation. Moreover, the variability in recovery may also be related to the type of nephrectomy performed (open surgery versus laparoscopic) and the individual's response to anesthesia or postoperative care. It is important to provide comprehensive follow-up care and counseling to address these concerns, as longer term symptoms could affect the donor's quality of life if not adequately managed.

A significant majority (97%) of participants strongly disagreed that their chances of entering a relationship were negatively impacted by donating a kidney. This suggests that, for most donors, their social and relationship dynamics remain largely unchanged. In fact, kidney donation is often perceived positively by others, which may lead to stable or even enhanced relationships. Similarly, another study found that most donors experienced improved relationships with their recipients, although a small percentage reported emotional strain or distancing following the donation.^[21] These findings are consistent with the results of this study, where 3.6% of donors reported that their relationships were negatively affected. While kidney donation typically strengthens social bonds, this indicates that a small subset of donors may require additional psychosocial support. Regarding employment opportunities after donation, although the majority of donors in this study (70.1%) did not believe their job prospects were impacted, a smaller group (7.1%) strongly felt their employment opportunities had been affected. This may stem from concerns about physical limitations following surgery or perceived stigma from potential employers regarding their health status. A study by Lieke Wirken found that some donors hesitated to return to work due to persistent fatigue, fear of overexertion, or anxiety about their long-term health.^[21] Ensuring thorough predonation counseling, as well as offering job support postsurgery, may alleviate some of these concerns and can be instrumental in helping donors reintegrate smoothly into the workforce.

In this study, regardless of the recipient, donors experienced fewer negative physical symptoms. Donors to immediate family members, strangers, and widowers all reported fewer physical consequences. These findings underscore the intricate connection between emotional states and physical recovery. While emotional stress is often linked to an increased risk of complications, for some individuals – such as widowers and altruistic donors – the act of donating may provide a psychological buffer that helps facilitate physical recovery. This emphasizes the importance of personalized psychological

support to optimize recovery based on each donor's emotional and social context. Immediate family relationships are significantly associated with fewer concerns about renal function postdonation. This could be attributed to stronger emotional support systems among family donors, as suggested by prior studies where familial bonds positively affect donors' perceived health. Immediate family donors experience better family attitudes postdonation compared to nonfamily donors (e.g. strangers). This is consistent with the literature showing that donating to a family member often leads to stronger familial connections, while donating to a stranger may create social or emotional distance.^[22] Furthermore, donors to immediate family or strangers report increased motivation and decreased regret. Research shows that family donors are highly motivated by their strong emotional bonds with the recipient and experience high levels of satisfaction postdonation, reducing feelings of regret. Studies, like one conducted by the RELIVE study, have consistently found that donors to family members report positive outcomes, viewing their donation as a life-saving act, similar to altruistic donors who donate out of a strong sense of compassion.^[23]

In this study, older individuals actually reported fewer disruptions to their personal and job-related activities after kidney donation. This finding challenges common assumptions that older individuals require longer recovery times. It suggests that older donors might be better prepared for the recovery process or have different expectations regarding physical activity and job demands. It is important to note that older donors who receive proper medical and psychological support may adapt more effectively to the recovery demands. Other research, particularly studies on older kidney donors, has similarly shown that older donors, especially those in good health, often experience minimal disruptions postdonation, which aligns with the findings of this study.^[24]

CONCLUSION

In the present study, most kidney donors were male, married, and donated their kidneys to immediate family members. High levels of donor satisfaction, improved quality of life, and strong motivation were reported by most participants, with minimal regret. While some donors experienced ongoing physical symptoms such as pain and fatigue, overall, the procedure was well-tolerated, and most donors felt their expectations were met.

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Conflicts of interest

There are no conflicts of interest.

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