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# Strategies for Monitoring and Supporting Living Donors in Korea: An Expert Position Paper

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#### **ABSTRACT**

Background: The number of organ transplants in South Korea has increased, with a notable rise in living donor transplants. Ensuring their long-term health and well-being is critical to address potential complications and maintain the success of the transplant programs.

Methods: A diverse advisory panel, including transplant experts and coordinators, was established to evaluate the follow-up care for living donors. The panel reviewed the results of a brief survey of donors regarding their donation experience, follow-up programs, guidelines, and policies from South Korea and other countries, aiming to identify best practices and recommend improvements.

**Results:** The study found that follow-up care for living donors in South Korea is inconsistent and lacks standardization. Significant variability exists in follow-up practices across different institutions, and comprehensive data on donor health pre- and post-donation are scarce. The need for continuous, systematic follow-up, encompassing both medical and psychological support, is emphasized to ensure donor well-being.

**Conclusion:** Improving follow-up care for living donors is essential. Establishing a national registry and increasing donor advocacy teams are meaningful steps to enhance donor care, ensure long-term health, and maintain ethical standards in organ donation.

Keywords: Transplantation; Living Donor; Monitoring; Donor Advocacy; Korea

## INTRODUCTION

In recent years, organ transplantation activities in South Korea have shown an increase, maintaining similar levels since 2019. While deceased donor transplant rates have remained decreased from 11.1 per million population (PMP) in 2016 to 9.22 PMP in 2020, living donor transplants have risen from 43.09 PMP to 49.74 PMP during the same period.¹ Notably, South Korea ranks second in living donor kidney transplantations and first in liver transplantations among 69 countries, reflecting a significant reliance on living donations due to the shortage of deceased donors.²

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#### Disclosure

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#### **Author Contributions**

Conceptualization: Ha J. Funding acquisition: Ha J. Investigation: Kang E, Woo HY, Hong SY. Methodology: Kang E, Woo HY, Hong SY, Lee H, Min S. Writing - original draft: Kang E. Writing - review & editing: Kang E, Ha J. Advancements in pharmacological and therapeutic approaches have enabled more ABO mismatch and human leukocyte antigen (HLA) incompatible transplants, particularly increasing spousal donations among older donors; the proportion of donors aged 50 and above in kidney transplantations increased from 22.7% in 2014 to 35.1% in 2021.<sup>3</sup> Moreover, the rising prevalence of metabolic risk factors such as obesity, hypertension, impaired glucose tolerance, and hyperuricemia in the general population has escalated metabolic risks among potential donors, highlighting the need for continuous management and comprehensive follow-up that includes both medical and psychological aspects, as current guidelines emphasize.<sup>4,5</sup>

The act of donating an organ is a profoundly altruistic activity, often involving healthy individuals giving a kidney or a portion of their liver. It is paramount that this act is carried out with the utmost respect for the autonomy of the donor and with efforts to ensure their medical safety post-donation. Despite these imperatives, research on long-term follow-up of donors and policy support for donors remain inadequate in South Korea. There is a pressing need to address these gaps to safeguard the well-being of donors and to sustain the viability of the transplantation system.

In response, an advisory panel was formed including kidney transplant experts from nephrology and surgery, liver transplant specialists from gastroenterology and surgery, an ethics expert with a background in law and ethics, and transplant coordinators. This paper presents an expert consensus assessing the state of living donor follow-up care in Korea and other countries, aiming to review potential support policies and provide insights that can inform policy development.

# **METHODS**

To comprehensively assess the current status of follow-up care for living organ donors in South Korea, this study employed a mixed-methods approach involving diverse stakeholders and data sources. Researchers conducted detailed inquiries with transplant centers across South Korea by directly contacting opinion leaders and professionals involved in transplantation. This approach gathered comprehensive data on the domestic situation regarding donor follow-up care. Additionally, a simple survey was administered to a sample of donors to capture their experiences and perspectives.

Moreover, an advisory panel was established, consisting of experts from various fields in transplantation, including nephrology, gastroenterology, surgery, ethics, and coordination. This diverse group facilitated a holistic understanding of the follow-up care landscape and ensured that recommendations were practical. The panel met three times each for both liver and kidney transplants to discuss and develop follow-up protocols for donors. Additionally, they exchanged written opinions throughout the course of the study. These efforts collectively provided a foundation for understanding the existing gaps in follow-up care and developing targeted recommendations for enhancing support for living organ donors.

#### **RESULTS**

#### Current status of policies and support for living donor

Principles for living donors' right to health and post-donation monitoring
The Declaration of Istanbul, established in 2008, advocates for comprehensive health



care for donors, including medical and psychosocial support at the time of donation and management of all short- and long-term outcomes related to the donation.<sup>6,7</sup> It stresses the protection and support for donors in securing health and life insurance and employment opportunities, ensuring that donors are not disadvantaged in any way and have access to necessary medical services, including dialysis and priority in transplantation in case of organ function impairment. The Amsterdam Forum on the Care of the Live Kidney Donor in 2004<sup>8,9</sup> stressed the importance of transplantation centers supervising and long-term monitoring for health risks including hypertension, obesity, diabetes, and proteinuria collaborating with general healthcare institute. Also, the forum emphasized that without established follow-up procedures for health monitoring, organ donation should not proceed. Similarly, the Vancouver forum on the care of liver organ donor specifies at least one year of follow-up for liver donors, acknowledging the potential challenges in sustaining long-term monitoring due to factors like health insurance and healthcare accessibility.<sup>10</sup> Upholding these principles ensures the protection of donor health, fosters public trust in the transplant system, and promotes ethical responsibility in organ donation.

#### Policies and implications for donor follow-up overseas

Table 1 provides a summary of donor follow-up practices and regulations from various countries. In the United States, according to 42 Code of Federal Regulations 482.94, transplant centers must document policies for managing living donors throughout the transplant and discharge phases, ensuring multidisciplinary care. According to Organ Procurement and Transplantation Network policy, living donors must be tracked for a minimum of 2 years, with Living Donor Follow-up forms completed and submitted at 6 months, 1 year, and 2 years post-donation, including data on patient status, cause of death, employment status, insurance changes, and readmissions. However, the lack of specific incentives or penalties for data collection may hinder the identification of long-term complications beyond the initial 2 years. 13

In the European Union, a holistic approach to donor care throughout the donor's lifespan is preferred, despite variability among member states. The European Parliament resolution of 22 April 2008 emphasizes the importance of monitoring and evaluating post-transplant outcomes and urges the adoption of common data analysis methodologies and long-term monitoring of both patients and donors. <sup>14</sup> The resolution "Establishing harmonised national living donor registries (CM/Res(2015)\_11)" recommends creating registries to manage organ quality, safety, and serious adverse reactions among living donors. <sup>15</sup> Moreover, the "Guidelines on standards of quality and safety of human organs intended for transplantation" necessitate the establishment of registries, including donor registration or record-keeping. <sup>16</sup> They advocate for ongoing monitoring and reporting systems for serious adverse events and responses to ensure compliance with the guidelines.

In the United Kingdom, all certified medical institutions must report serious adverse events related to organ transplantation to National Health Service Blood and Transplant, covering incidents from donation to transplantation that may cause infectious disease, death, disability, or prolonged hospitalization. <sup>17</sup> In Singapore, kidney donors have follow-up visits scheduled at 6 weeks, 6 months, 9 months, and annually, with telemedicine used to reduce hospital visits, and the National Kidney Foundation covering costs for financially disadvantaged donors. In Switzerland, the Swiss Organ Living Donor Health Registry schedules follow-ups at 1, 3, 5, 7, and 10 years post-donation, with biennial follow-ups thereafter, achieving a 65% follow-up rate by the 10th year with government support. <sup>18,19</sup> In Australia and New Zealand,



Table 1. International follow-up management regulations and guidelines for living donors

Countries	Regulations or recommendations	Details				
United States (US)	Condition of participation: Patient and living donor management (42 Code of Federal Regulations § 482.94)	Transplant centers must have documented policies for managing the evaluation transplant, and discharge of living donors. They must also provide access to social services and nutrition support.				
	Organ Procurement and Transplantation Network (OPTN) policy: Data submission requirements, Reporting of living donor events	Follow-up forms are required at 6 months, 1 year, and 2 years after donation. However, there are no penalties for missing data or incentives to encourage longer-term follow-up.				
	OPTN policy: Recommendations for maximizing donor follow-up	Recent emphasis on donor follow-up has led to discussions on strategies to improve long-term monitoring. Four key strategies were recommended: creating programs focused on donor safety and outcomes, building strong relationships with donors, systematic approach to follow-up with quality assurance reviews of efforts' success, and minimizing the burden on donors.				
European Union (EU)	Organ donation and transplantation: Policy actions at EU level (P6_TA(2008)0130)	Emphasizes monitoring and evaluating post-donation outcomes based on best practices, encouraging the adoption of a common methodology for data analysis (Article 46). It also recommends extending monitoring for as long as the patient survives or the graft functions (Article 47).				
	Committee of Ministers Resolution 2015_11 on Establishing Harmonised National Living Donor Registries (CM/Res(2015))	Recognizes the differences in follow-up protocols across member states and recommends the creation of registries for monitoring the quality and safety of transplanted organs. It stresses the importance of long-term, preferably lifelong, follow-up to ensure donor safety.				
	On standards of quality and safety of human organs intended for transplantation (2010/53/EU)	Mandates the establishment of registries for tracking donor information and monitoring serious adverse events. Transplant centers are required to regularly report and manage these events.				
United Kingdom (UK)	NHS Blood and Transplant SOP3888/3 – Reporting an Organ Donation or Transplantation Incident to NHS Blood and Transplant	All certified medical institutions in the UK are legally required to report serious adverse events or reactions related to organ donation to NHS Blood and Transplant.				
	British Transplantation Society & UK kidney Association Recommendations	Living kidney donors should undergo lifelong follow-up, including annual kidney function tests, urinalysis, blood pressure, and general health assessments.				
Singapore		Living donors are scheduled for follow-up visits at 6 weeks, 6 months, 9 months, and then annually. Telemedicine is used to reduce hospital visits. For financially disadvantaged donors, the National Kidney Foundation covers the costs of surgery and follow-up care.				
Switzerland	Swiss Organ Living Donor Health Registry (SOL-DHR)	Follow-up occurs at 1, 3, 5, 7, and 10 years post-donation, with biennial follow-ups thereafter. Despite government support, only 65% of donors complete the 10-year follow-up.				
Australia/ New Zealand	The Australia/New Zealand Dialysis and Transplant Living Kidney Donor Registry	Established in 2004, this registry tracks long-term outcomes of living kidney donors.				
	Organ and Tissue Donation by Living Donors by Australian Government National Health and Medical Research Council (NHMRC)	Donors should receive medical and psychological care for at least 1-year post- donation or until complications are resolved. Evaluations focus on the donor- recipient relationship and psychological coping strategies. Mental health assessments like the Short Form-36 (SF-36) can be used.				
Norway		Follow-up is recommended at 3–4 weeks, 3 months, annually for the first 5 years, and every 5 years thereafter. By the 15-year mark, the follow-up rate is approximately 77%.				

NHS = National Health Service.

the Australia/New Zealand Dialysis and Transplant Living Kidney Donor Registry, started in 2004, ensures long-term follow-up focusing on donor-recipient relationships and coping strategies.<sup>20</sup>

#### **Current status of post-donation monitoring in Korea**

Current status of post-donation monitoring of living donors

Donor nephrectomy surgery was performed either by the transplant surgeons or urologists depending on the hospital. The current follow-up schedule for living donors at each transplant center in Korea is summarized in **Table 2**. Follow-up observation for short-term complications occurring after donor nephrectomy were typically conducted within approximately two weeks to one-month post-surgery, mostly by the donor surgeon.

Following donor hepatectomy, the first post-donation visits typically occurred within 1–2 weeks or one month. The frequency of follow-up visits varies among centers, but most



Table 2. The current status of post-donation follow-up management for living donors by tertiary hospitals in Korea

Center	Department	First visit after discharge	Follow-up interval	Follow-up duration	Laboratory tests and evaluation			
iving kidney donors	3							
A	Urology	7-10 days	1 wk	2 wk after operation				
	Nephrology	1 mon	1, 6, 12 mon, every year after 12 mon	Lifelong	Blood pressure, BMI, CBC, routine chemistry, lipid profile, electrolyte, cystatin C, urinalysis with urinary sediment, UPCR			
					After 6 mon: measured GFR After 1 yr: 24 hr urine collection, NGAL, SONO doppler kidney			
В	Transplant surgery or urology	urology 9 mon		Lifelong	Blood pressure, BMI, CBC, routine chemistry, lipid profile, electrolyte			
	Nephrology	1 yr, follow-up visits if donors want	6 mon	Lifelong	cystatin C, urinalysis with urinary sediment			
С	Transplant surgery or urology	1 mon	1, 3, 6, 12 mon, every year after 12 mon (3-mon visit can be omitted)	Lifelong	Blood pressure, BMI, CBC, routine chemistry, lipid profile, electrolyte, cystatin C, urinalysis with urine sediment, UACR, NGAL Imaging study if needed			
	Nephrology Simultaneous follow-up with surgery department only for some patients who want or need it							
D	Transplant surgery	1 wk	1, 6, 12 mon, every year or	Lifelong	mo want of fleed it			
D	or urology		two, depending on residency		have at an anal is			
	Nephrology Simultaneous follow-up with surgery department only for some patients who want or need it							
E	Urology	3-4 wk	2-5 mon	<del>-</del>				
	Nephrology	3-4 wk	2-5 mon	-				
F	Urology	1-2 wk	N/A	-	CBC, routine chemistry			
	Nephrology	1 mon	1 yr	Lifelong				
G	Transplant surgery	3 wk	1 yr	-	CBC, routine chemistry, electrolyte, urinalysis DTPA renal scan			
iving liver donors								
A	, , ,		1, 2.5, 4, 8, 12 mon, every year after 12 mon		CBC, liver function tests Imaging study: CT scan after 4 mon			
В	Liver transplant surgery	1 mon	1, 3, 6, 12, 24 mon	2 yr	maging study. Or sounditor 1 mon			
C	Liver transplant surgery	1 mon	3, 6, 12 mon	1 yr				
D	Liver transplant surgery	1-2 wk	3, 6, 12 mon, every year after 12 mon	5 yr (additional visits if donors want)	Blood pressure, body weight, CBC, liver function test, lipid panel Imaging study: CT scan after 3, 6, 12 mon, 5 yr			
E	Liver transplant surgery	10-14 days			CT scan			
	Hepatology 10–14 days 4 mon, every 6 mon or 1 yr depending on the evaluation		Lifelong	CBC, liver function tests, lipid panel, HbA1c				
					Imaging study: liver SONO after 1, 3, 5 yr, fibroscan after 1 yr			
F	Liver transplant surgery 1 wk 3, 9, 12, 24 m		3, 9, 12, 24 mon	2 yr	Liver function test			
					CT scan after 1, 3, 12 mon			
G	Liver transplant surgery	1 mon	1, 3, 6, 12 mon	1 yr				

BMI = body mass index, CBC = complete blood count, UPCR = urine protein/creatinine ratio, GFR = glomerular filtration rate, NGAL = neutrophil gelatinase-associated lipocalin, SONO = sonography, UACR = urine albumin/creatinine ratio, N/A = not applicable, DTPA = diethylenetriaminepentaacetic acid, CT = computed tomography, HbA1c = hemoglobin A1c.

centers scheduled at least three visits within the first-year post-donation. Generally, surgical departments conducted the follow-up observations for donors. Follow-up tests included complete blood count, liver function tests, lipid panels, and liver computed tomography (CT) scans for living liver donors. The duration of follow-up varied widely, with some centers conducting lifelong monitoring while others limited it to one year.



Table 3. Recommendation of follow-up plan for living donors through consensus of advisory committee members

valuation items	Time point after transplantation						
	1 mon	3 mon	6 mon	12 mon	Every year after 12 mon		
iving kidney donors							
Laboratory tests							
Hemoglobin*	0	0	0	0	0		
Fasting glucose*	0	0	0	0	0		
HbA1c				0	0		
Serum creatinine*	0	0	0	0	0		
Estimated GFR (CKD-EPI)*	0	0	0	0	0		
Urine protein*	0	0	0	0	0		
Lipid panel			0	0	0		
General evaluation							
Body mass index*	0	0	0	0	0		
Blood pressure*	0	0	0	0	0		
History and current status of alcohol consumption	0	0	0	0	0		
History and current status of smoking	0	0	0	0	0		
Assessment of mental health status			Δ	Δ	Δ		
Imaging tests							
Kidney SONO				<b>A</b>			
iving Liver donors							
Laboratory tests							
Platelet*	0	0	0	0	0		
Total bilirubin	0	0	0	0	0		
AST*	0	0	0	0	0		
ALT*	0	0	0	0	0		
GGT*	0	0	0	0	0		
PT/INR	0	0	0	0	Δ		
Blood glucose*	0	0	0	0			
Lipid panel	0	0	0	0			
General evaluation							
Body mass index*	0	0	0	0	0		
Blood pressure*	0	0	0	0	0		
History and current status of alcohol consumption	0	0	0	0	0		
Assessment of mental health status		0		0	<b>A</b>		
Imaging tests							
Liver CT		0			<b>A</b>		
Liver SONO		-			_		
Fibroscan					_		

Recommendation level marked as follow: O, Mandatory;  $\triangle$ , Recommended; and  $\blacktriangle$ , Case-specific.

The test items marked with an asterisk (\*) are those available in the health check-up conducted by the National Health Insurance Service.

HbA1c = hemoglobin A1c, GFR = glomerular filtration rate, CKD-EPI = Chronic Kidney Disease-Epidemiology Collaboration, SONO = sonography, AST = aspartate transaminase, ALT = alanine transaminase, GGT = Gamma-glutamyl transferase, PT/INR = prothrombin time and international normalized ratio, CT = computed tomography.

# Recommendations for follow-up care for living donors in Korea

To ensure the long-term health and safety of kidney donors, a consensus has been established regarding follow-up evaluations (**Table 3**). This involves both mandatory assessments and recommended practices structured to monitor and support the donors effectively.

### Kidney donors

The consensus among medical professionals established guidelines for monitoring kidney donors, focusing on assessing renal function through parameters like glomerular filtration rate and serum creatinine levels within the first-year post-donation, followed by annual evaluations. It includes monitoring for various health indicators such as proteinuria, blood pressure, glucose levels, and cholesterol annually. Lifestyle modifications, especially smoking cessation, are emphasized post-donation. Living kidney donors may require long-term surveillance with renal ultrasound post-donation to monitor kidney health and detect any



potential complications over time. Female donors of childbearing age need to undergo close monitoring for pregnancy-related complications, such as gestational hypertension and preeclampsia, post-donation to ensure maternal and fetal health.

#### Liver donors

Liver donors should undergo annual clinical evaluations for up to 5 years after surgery, with blood tests every 3 months in the first year and then annually. Beyond the initial 5-year period, lifelong follow-up is recommended to monitor long-term health and manage any potential complications, though it is advised rather than mandated. A liver CT scan should be done within 5–6 months post-donation, with further tests based on pre-donation fatty liver status. If abnormalities arise in blood tests or CT scans, additional imaging tests are advised during monitoring.

#### Evaluation of the mental health of living donors after donation

Overseas studies have reported that kidney donors may experience psychological issues post-donation, with rates ranging from 8% to 29%. <sup>21-24</sup> Factors such as non-white ethnicity, younger age at donation, longer recovery periods after nephrectomy, financial burden, and moral obligation to donate have been identified as risk factors. <sup>23</sup> Additionally, the prognosis of recipient grafts may have an effect on the donor's emotional state. Therefore, kidney donors may require long-term mental health evaluations post-donation. We recommended that symptom and behavior assessment scales should be administered at 6- and 12-months post-nephrectomy with referrals to psychiatric specialists if necessary.

For liver donors, several studies have shown that over 30% donors experience mood disorders post-donation. Reports of significant depression among donors have been documented during outpatient follow-ups or through online platforms. Compared to the general population, living liver donors have a 3.43 times higher risk of suicide-related mortality, with marital status and unemployment identified as significant risk factors. <sup>25</sup> Additionally, emotional instability has been reported in 32.8% of donors, although most cases involve recipients being diagnosed with recurrent liver disease or experiencing mortality. Meta-analysis on post-donation quality of life have indicated a significant increase in anxiety three months post-donation, with subsequent recovery to pre-donation levels after 3 months. <sup>26-28</sup> Given these findings, mental health evaluations should accompany liver donation procedures. We recommend conducting depression and anxiety self-assessment tests (Patient Health Questionnaire-9, Generalized Anxiety Disorder 7-item) at 3 months and 1 year post-donation. Donors reporting significant depressive or anxious symptoms should undergo long-term mental health monitoring after one year, especially if they experience persistent mood disorders or if the recipient's prognosis is unfavorable.

#### **DISCUSSION**

The need to increase support for living donors is evident. Recent studies have shown that while some donors express concerns regarding medical issues including post-surgery pain or decreased kidney and liver function, a significant number face social and economic challenges. About 34% of kidney donors reported changes in their financial status post-donation. According to the "Study on Follow-up Management and Support Measures for Living Donors" report on 2023, 26% of liver donors experienced limitations in obtaining or maintaining insurance after donation. Additionally, approximately 20% of donors faced



economic difficulties due to expenses incurred at the time of donation or disruptions in their careers due to taking time off work or school. Research also indicates that the likelihood of job loss, difficulty in finding new job, and decreased income can increase within first year after donation. Particularly for liver donors, over 60% of whom are over 34 years old, the psychological and life stage challenges may be added to their burden. With the increasing necessity for living organ transplants due to the shortage of deceased donors, it is crucial to remove barriers for living donors. However, current legislation on organ transplantation lacks provision for the follow-up management and support of living donors. Most living donors in Korea donate to family members, underscoring the need for social consensus on supporting these donors. A survey of the general public revealed that, after understanding the implications of kidney transplants, approximately 30% replied donors might face socioeconomic disadvantages, and nearly 80% thought economic and social support for donors was necessary. Nonetheless, direct financial incentives for donors should be avoided to prevent organ trade. Ethical and socially acceptable support measures for donors must be established to align with public expectations.

Experts agreed on providing specific identification codes for kidney and liver donors to support their follow-up care. We particularly recommended including "living organ donors" in the reimbursement criteria for annual urological ultrasound for kidney donors. Additionally, they concluded that considering insurance coverage for the treatment of donor scars (keloids) with a physician's report would be a significant form of support.

The second aspect discussed was the necessity of dedicated healthcare professionals or coordinators, known as the donor advocacy team, to provide guidance and medical care throughout their donation journey from pre-donation to post-donation for living organ donors. These professionals play a crucial role in advocating for the donors' needs and ensuring they receive appropriate medical care, including regular monitoring and management of any post-donation issues. In Korea, where family transplants through living donors are common, many donors often feel pressured by family members and may not have sufficient time to fully consider their decision based on adequate information. The establishment of a donor advocacy team could help address this issue by providing realistic support to donors. Additionally, this team requires ensuring that the autonomy and well-being of donors by advocating for their rights and independency from their potential recipients. While it's crucial for donors and recipients to receive separate care during all stages of treatment, the reality in many tertiary hospitals in South Korea, where a large number of patients must be seen in a short time, often results in joint consultations. Previous research has indicated that the monitoring of living organ donors can be interrupted depending on which medical department the donors were followed-up. This highlights the need not only for medical teams in specific departments but also for dedicated coordinators, currently available in only a few institutions nationwide, emphasizing the importance of donor advocacy. Establishing policies to steadily increase the number of medical professionals dedicated to living organ donors is essential for the future of donor advocacy.

In Korea, two main databases related to organ transplantation are managed: the Korean Network for Organ Sharing (KONOS) registry and the Korean Organ Transplantation Registry (KOTRY). Since the enactment and promulgation of the Organ Transplant Act in 1999, all transplant activities in Korea have been managed by the KONOS. The KONOS registry includes data on potential, living, and deceased donors, and transplant candidates, covering blood and HLA types. While it includes information on all legally conducted



transplant recipients in Korea, it lacks data on the pre-donation medical condition of living donors and long-term complications for both donors and recipients. KOTRY, a registry cohort initiated in 2014, tracks complications and survival rates of solid organ transplant recipients but only collects donor data up to one-year post-donation, resulting in insufficient long-term complication data for living donors.<sup>32</sup>

Long-term follow-up management is crucial for both kidney and liver donors, thus, as mentioned earlier, in western countries with living organ transplantation programs, regulations ensure the systematic gathering of data on donors after donation, with transplantation centers mandated to submit or manage this information. However, there has historically been a lack of attention to this issue, resulting in inadequate continuous monitoring for those donors. Additionally, due to insufficient interest and support for living donors and the absences of a comprehensive data system, it is challenging to understand the current status and specific difficulties faced by living organ in Korea. A full-scale survey is necessary to minimize bias and accurately assess their post-donation status. To establish a continuous follow-up management system for domestic donors, systematic data collection is essential. Considering this, the Organ Transplant Act was amended in February 2024 to require the submission of records related to living organ donors to the KONOS. Following this, it will be necessary to establish enforcement regulations that provide sufficient rewards without burdening medical institutions, enabling systematic data collection and management of living donors, and facilitating various research studies.

In conclusion, Korea's organ transplantation has seen a significant increase in living donor transplants due to the shortage of deceased donors. However, the long-term follow-up and support for living donors remain inadequate. There is a lack of comprehensive data on the pre-donation medical conditions and long-term complications of donors in Korea. The importance of continuous follow-up for donors is increasingly recognized, as it is crucial for ensuring their long-term health and well-being. To address these gaps, the Organ Transplant Act was amended in February 2024 to mandate the submission of records related to living organ donors to KONOS, with further regulations needed to ensure systematic data collection and management.

While the establishment of mandatory data collection on post-donation outcomes of organ donors is a crucial step, it is equally important to ensure the comprehensive and standardized healthcare for donors. Globally recognized guidelines for donor management provide a reliable framework for ensuring donor well-being. However, the implementation of these guidelines into routine clinical practice requires collaboration between medical institutions, academic societies, and the government. Academic societies, in particular, play a key role in educating healthcare professionals on best practices for donor care, while government support is important for establishing uniform policies. These efforts will protect donor health and strengthen the ethical foundation of Korea's transplantation programs.

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