



Review

Shared Decision-Making in Solid Organ Transplantation: A Review

Alessandra Agnese Grossi ^{1,2}

¹ Department of Human Sciences, Innovation and Territory (DISUIT), University of Insubria, Via O. Rossi 9 (Pad. Antonini), 21100 Varese, Italy; aa.grossi@uninsubria.it

² Center for Clinical Ethics, Department of Biotechnologies and Life Sciences, University of Insubria, 21100 Varese, Italy

Abstract: Solid organ transplantation entails numerous complex medical and ethical decisions. Shared decision-making (SDM) has been advocated as the optimal model for navigating these decisions, providing a collaborative framework that enhances person-centered care. This approach involves patients, caregivers, and healthcare professionals in the decision-making process, ensuring that clinical decisions align with patient preferences, values, and individual circumstances alongside clinical indications. This paper reviews the implementation of SDM throughout the transplantation journey, from diagnosis and transplant referral, pre-transplant assessments, waiting lists, to the organ offer, perioperative period, and long-term follow-up. Barriers to SDM include factors at the patient, provider, and system levels, including inadequate patient–provider communication. Effective SDM requires tailored educational resources, prognostic tools, clinician training, collaborative care models, and supportive policies. Additionally, leveraging technology, such as artificial intelligence and mobile applications, can enhance patient engagement and decision quality. SDM promotes equity by involving all patients—including those from more vulnerable groups—in meaningful conversations about their treatment options, thereby mitigating disparities in access and outcomes. Future research should focus on the long-term impacts of SDM interventions, the development of comprehensive prognostic tools incorporating patient-reported outcomes, and systemic changes to integrate SDM into clinical practice, aiming to improve patient outcomes and person-centered care.



Academic Editor: Nobuhisa Akamatsu

Received: 27 August 2024

Revised: 12 November 2024

Accepted: 30 December 2024

Published: 13 January 2025

Citation: Grossi, A.A. Shared Decision-Making in Solid Organ Transplantation: A Review. *Transplantology* **2025**, *6*, 1. <https://doi.org/10.3390/transplantology6010001>

Copyright: © 2025 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: shared decision-making; communication; person-centered care; ethics; organ transplantation

1. Introduction

Advances in surgical techniques, immunosuppressive regimens, and perioperative and long-term management of recipients have made solid organ transplantation (SOT) a safe and highly effective treatment for individuals with end-stage organ failure. However, SOT is not without risk, and patients are confronted with many complex decisions as part of the process of informed consent [1]. From end-stage organ disease onset through to the subsequent, yet interrelated stages of SOT, decision-making about treatment options must not be based solely on clinical parameters, biomarkers, and physical capacity. It must be based equally on the unique needs, preferences, considerations, values, individual life circumstances, and goals that vary among patients [1–3]. Scholars, institutional bodies, and scientific societies have recommended shared decision-making (SDM) as the most desirable model for decision-making in SOT [1,4–6]. The integration of SDM within SOT

aligns closely with the principles of person-centered care, an emergent paradigm that emphasizes the importance of understanding ‘what matters to the patient’ rather than solely focusing on ‘what the matter is with the patient’ [7–9]. Person-centered care advocates for the involvement of patients in their own care decisions, ensuring that their values, needs, and preferences are prioritized. This approach fosters a therapeutic partnership between patients and healthcare professionals (HCPs), facilitating better health outcomes, enhanced patient satisfaction, and improved quality of life [10,11]. Improved early patient engagement and participation in the care process, and the ability to facilitate the detection of modifiable factors to improve outcomes at different stages of the SOT pathway, may contribute to the prevention of disparities in the continuum of care [3,4,12–15]. Incorporating SDM into the framework of person-centered care thus represents a holistic approach to SOT, where the patient’s voice is central to all stages of the transplant journey, ultimately leading to more tailored and effective care strategies [13].

This paper reviews the literature on SDM in the process of SOT, from the time of end-stage organ disease onset and transplant referral, pre-transplant work-up and time on the waiting list, up until the time of the organ offer/transplant surgery, the perioperative period, and the subsequent long-term follow-up. Barriers to the successful implementation of SDM and potential areas for intervention to enable SDM in clinical practice are also addressed. Finally, future research directions are presented.

2. Definitions: Informed Consent and Shared Decision-Making

Consent is not a one-time event or a patient’s signature to protect clinicians and surgeons from liability. It is an ongoing relational and educational process that must align with the principles of SDM to be truly effective [16]. In complex clinical scenarios with multiple treatment options and uncertain outcomes, it is crucial to engage patients in a thorough and in-depth dialogue that considers their needs, values, preferences, hopes, and fears. This comprehensive approach to informed consent ensures that the patient’s voice is integral to the decision-making process [17]. SDM involves a collaborative approach where patients, HCPs, and—when the patient desires—caregivers jointly make decisions. This model requires the provision of reliable, up-to-date, and evidence-based information about all available options in formats that are accessible and understandable to patients and their families [18]. The role of HCPs in SDM is to facilitate these discussions by covering all possible treatment alternatives, including non-operative options and the choice of no treatment, while detailing the risks, benefits, side effects, and potential clinical course of each option [11]. To empower patients to make informed decisions that align with their personal values and life goals, clinicians must engage in active listening and identify what is most important to each patient. This individualized approach supports patients in choosing the most appropriate treatment option for their unique circumstances [11,18].

3. Shared Decision-Making in the Solid Organ Transplant Journey

The process of SOT can be pragmatically divided into several key stages, each with unique challenges and opportunities for SDM. These stages include the onset of end-stage organ disease and initial referral for transplantation, pre-transplant work-up and wait-list time, the organ offer and transplant surgery, the perioperative period, and long-term follow-up. Throughout these stages, patients and their loved ones must navigate a complex array of medical, ethical, and psychosocial considerations, necessitating thorough patient understanding to enable active patient participation in decision-making [1,19]. Open communication and patient education are therefore emphasized throughout the SOT process to address these complexities.

Throughout the following paragraphs, only the general process will be addressed. The specific decision-making nuances associated with different types of SOTs are beyond the scope of this work.

3.1. Pre-Transplant Stages

3.1.1. End-Stage Organ Disease Onset and Transplant Referral

When a patient is initially diagnosed with end-stage organ disease and referred for transplant evaluation, an SDM approach can help the patient and their family understand the severity of the condition, the potential benefits and drawbacks of transplantation, and the available treatment options. This initial stage is crucial for setting the tone for the entire transplant journey, as the patient and their loved ones face significant, life-changing decisions ahead. Further, transplant recipients must undergo substantial lifestyle changes post-transplant, including strict medication adherence and regular follow-ups, which should be discussed early on to prepare them for the lifelong commitment required. The decision-making process involves various considerations from both the clinician's and the patient's perspectives. Each type of organ transplant presents unique challenges and requirements, adding layers of complexity to the process [6]. Comprehensive information is essential for all patients pursuing transplant. Patients need to understand their condition, treatment options, and the impact of comorbidities [20–26]. When this applies, discussions extend to living donation, considering the emotional, physical, and logistical impacts on both recipients and donors [27–35]. Decision-making about treatment can significantly impact quality of life, emotional well-being, and lifestyle. For instance, choosing a treatment option, such as dialysis modality, can impact both work ability and family stability [29,30,36–42]. Managing comorbidities and considering palliative care are also crucial [43,44]. Ethical considerations play a role in evaluating the risks and benefits of various treatments [45,46]. Financial implications are critical, ensuring patients can make informed choices considering their economic circumstances [47]. Prognosis helps establish care goals and limits on support, guiding referrals and personalized care approaches [28,48,49].

The complexity of high-risk SOT decisions necessitates early end-of-life discussions, focusing on quality of life and societal factors amid donor organ shortages [50]. These discussions are crucial in ensuring that patients' values and preferences are respected, especially when considering, for example, the risks associated with invasive procedures like dialysis, extracorporeal membrane oxygenation (ECMO), or left ventricular assist devices (LVAD) [27,51,52]. It is essential that these preferences are clearly documented and revisited at regular intervals to ensure alignment with the patient's evolving values and circumstances.

Across all organ types, integrating patients' interpretations of their health with quantitative treatment effectiveness measures helps HCPs better partner with patients. This approach ensures that physiological needs, autonomy, and empowerment are addressed, allowing patients to engage in meaningful decision-making [53].

3.1.2. Pre-Transplant Work-Up and Time on the Waiting List

As patients navigate pre-transplant assessments and are registered on the transplant list, SDM becomes critically important. Patients may face complex decisions, such as whether to accept a donor organ that carries higher risks of disease transmission or lower graft quality, versus waiting longer for a standard risk donor or a higher-quality organ [1,2,5,6,54–57]. This requires balancing the trade-offs between extended waiting times and the risk of psychosocial and/or clinical deterioration or mortality while on the list. For instance, a significant majority of patients desire involvement in decisions about their transplant, including the quality of the organ [58]. This desire for involvement,

however, can lead to decisional conflicts, particularly when patients must weigh the desire for the best organ against potentially longer waiting times [58,59]. Ongoing discussions about different types of donor organs ensure that patients remain well-informed and able to reassess risks and benefits when an organ becomes available [60].

In addition to discussing these options, comprehensive patient information must currently address advancements in organ preservation technologies, such as normothermic and subnormothermic perfusion methods, regional perfusion, and innovative transportation techniques, which are especially relevant for organs from marginal donors and donations after circulatory death (DCD) [61–64]. Such methods are increasingly becoming standard practice in high-volume centers and can significantly impact both the evaluation and quality of transplanted organs, influencing short- and long-term graft survival. Patients and families must be made aware of these evolving technologies and their implications for transplant outcomes [65].

Furthermore, experimental options like xenotransplantation require especially careful discussions, as these decisions involve high risks and ethical considerations. For instance, when patients lack alternatives like an allotransplant or artificial support, their autonomy may be compromised, as participation in xenotransplantation trials can be their only option short of facing imminent death. This lack of choice challenges the voluntariness of consent, particularly for patients who might be willing to choose xenotransplantation to avoid long-term distress and uncertainty, or for those motivated to advance medical research. Thus, respecting patient autonomy in xenotransplantation necessitates transparent, thorough discussions of the risks and potential outcomes [66].

3.2. Time of the Organ Offer

The decision to accept or decline an organ offer is complex, often requiring patients to weigh the risks of accepting a less-than-ideal organ against the risks of prolonged waiting time. Patients' willingness to accept higher-risk organs with shorter wait times versus waiting longer for potentially better organs exemplifies the complex trade-offs involved. For instance, some patients may prefer a higher-risk organ with a shorter wait time over waiting longer for a potentially better organ [67]. This decision is particularly challenging when considering organs from donors with increased risk factors, such as disease transmission or graft failure [5,58]. Similarly, the use of organs from donors with certain infections (e.g., HCV) can offer a net benefit, though the optimal decision varies based on individual patients' perceptions of risk, priorities, and how they weigh these factors [68,69]. The use of such donors can expand the donor pool, shorten wait times, and decrease wait-list mortality, but understanding expected outcomes remains crucial for effective SDM [70]. Understanding decisional models can help promote SDM among transplant patients and HCPs [71].

The preference for being informed about donor-related risks at the time of the organ offer is significant, with studies showing that 53.3% of patients prefer this timing. Among these patients, 79.8% wish to be involved in making the decision to accept or decline an organ for transplantation, highlighting the importance of SDM at this stage of the transplant process [58]. Emphasizing SDM empowers patients by integrating their preferences and values with clinical considerations, facilitating a more personalized approach to consent and organ acceptance [55,72]. Despite the predominant medical nature of the decision-making process at this stage, recent efforts have highlighted the importance of enhancing patient–provider dialogue to optimize decision outcomes and mitigate disparities in access to transplantation [5,73–75]. For example, although accepting high kidney donor profile index (KDPI) kidneys can improve survival compared to dialysis, viable kidneys may be discarded due to variable center practices and risk-averse behaviors, particularly in regions

lacking regulatory oversight for transplant center outcomes [73]. Additionally, studies indicate that patients may remain underinformed about their options due to inconsistent communication regarding risks and benefits, thereby limiting effective SDM [74,75]. A comprehensive approach that promotes transparency and consistent information-sharing not only empowers patients but also supports their autonomy in navigating the complexities of SOT even at the time of the organ offer.

3.3. Post-Transplant Stages

3.3.1. Perioperative Period

SOT presents a myriad of complex clinical scenarios where SDM is essential to align medical recommendations with patient preferences and values. For example, the detection of neoplasia in a donor early on post-transplantation can lead to critical decisions about whether to discontinue immunosuppressive therapy and consider the removal of the transplanted organ. While these events are extremely uncommon [76], a case report illustrates the significance of SDM in such scenarios [77]. In this case, due to concerns about transmitted malignancy, a transplant nephrectomy and return to dialysis were recommended to the patient. Despite being fully informed about the risks and benefits of discontinuing immunosuppressive therapy versus continued monitoring, the patient chose not to follow the recommended clinical option of removing the transplanted kidney and resuming hemodialysis. This decision underscores the patient's right to weigh their personal values and preferences against medical advice, highlighting the essence of SDM in managing serious adverse reactions or events in the perioperative period [1,77].

3.3.2. Post Transplant and Long-Term Follow-Up

SDM post-transplantation and during long-term follow-up plays a pivotal role in ensuring optimal outcomes and person-centered care across various transplant scenarios. For example, the use of immune checkpoint inhibitors in patients with advanced cancers introduces complex considerations due to the risk of allograft rejection, which must be weighed on a case-by-case basis through an SDM-like mechanism [78]. Similarly, in cases where patients have poorly functioning transplants, alternative treatments such as chronic management may be considered, necessitating informed discussions guided by multidisciplinary teams to support decision-making [79]. Additionally, strategies to mitigate post-transplant lymphoproliferative disorders underscore the importance of tailored immunosuppressive regimens and screening, with SDM playing a crucial role in balancing individualized risks and benefits [80].

Longer-term transplant recipients often seek to resume various activities, including rigorous physical pursuits, underscoring the transformative impact of transplantation and the need for ongoing patient education and support [81]. Beyond physical activities, reproductive decisions post-transplantation are increasingly relevant. SDM is crucial in guiding decisions regarding pregnancy, requiring preconception planning, risk assessment, and comprehensive multidisciplinary care [82–87]. Women navigating pregnancy decisions face unique challenges necessitating tailored SDM approaches. Scholars advocate for comprehensive individualized counseling that respects women's values and priorities, aiming to optimize both maternal and fetal health outcomes [84,87]. Discussions around reproductive options require nuanced consideration of life expectancy and medical risks, highlighting the importance of evidence-based counseling to respect patient autonomy while addressing medical complexities [85,86]. Integrating personalized follow-up models, such as remote monitoring and patient-initiated follow-up, may offer transplant recipients greater control over routine care and may reduce unnecessary visits, thus supporting a

person-centered approach aligned with SDM and enhancing the delivery of consistent, adaptable care for transplant recipients [88].

Throughout these varied transplant contexts, SDM serves also as a cornerstone in end-of-life care discussions, ensuring that patients receive compassionate and holistic management aligned with their values and preferences [89]. By integrating patient perspectives and clinical expertise, SDM fosters informed decision-making tailored to each transplant recipient's unique circumstances, thereby optimizing long-term health outcomes and quality of life.

4. Barriers to Shared Decision-Making in Solid Organ Transplantation

Despite its importance, prior studies have noted that SDM in SOT faces numerous, multifaceted barriers that complicate its implementation [6]. Addressing these barriers through targeted interventions and systemic changes is essential for improving patient engagement and decision-making in transplantation healthcare (Table 1).

Table 1. Multi-level barriers to shared decision-making in the transplant journey.

Patient-Related Barriers	HCP-Related Barriers	System-Related Barriers
Limited health literacy	Attitudes towards recipient eligibility and access	Complex and fragmented healthcare systems
Low socioeconomic status	Paternalistic attitudes	Poor coordination among specialists and care teams
Inadequate empowerment from HCPs	Insufficient information sharing	Institutional policies and resource constraints
Cognitive impairment	Lack of training on prognosis discussions	Cultural and organizational norms undervaluing patient input
Lack of family and social support	Lack of communication training	Inconsistent reporting of person-centered outcomes in trials
Cultural and language differences	Unawareness of available options among patients	Limited consultation time and lack of decision aids
Emotional and psychological distress	Misconceptions	Lack of guidelines, protocols, and workflows for SDM implementation
Comorbidities		
Misinformation about transplant processes		
Inadequate access to educational materials and decision aids		
Health system navigation challenges		
Socioeconomic and logistical barriers		

HCP, Healthcare Professional; SDM, Shared Decision Making; SES, Socioeconomic Status.

4.1. Patient-Related Barriers

Barriers may stem from patients' limited health literacy, which can hinder understanding of their disease and treatment options. This issue is particularly prevalent among individuals with low socioeconomic status, poor language proficiency, and comorbidities [90–92]. Socioeconomically deprived individuals may experience inadequate empowerment from HCPs, leading to low patient activation and confidence in managing their health [93]. Additionally, for example, among individuals with CKD, patients may initiate kidney replacement therapy when they are very sick, leaving little opportunity to make

informed decisions about treatment options [36]. Early referral to specialized transition clinics could mitigate these issues by providing timely education, thereby facilitating informed decision-making prior to kidney replacement therapy [94].

The complexity and emotional weight of the transplant evaluation process can overwhelm patients and families, impacting other aspects of their care [95]. Cognitive impairment in patients further complicates their ability to participate in SDM [96]. Support from family and friends is crucial and involving them in medical decisions can help patients process information and make informed choices [97–99]. However, a lack of partnership in SDM, especially among patients from minority groups, and ineffective communication between HCPs and patients remain significant obstacles [100,101]. Additional barriers include cultural and language differences. Patients from diverse cultural backgrounds may face challenges in understanding medical information due to language barriers and different health beliefs, making it difficult for them to fully engage in SDM [100–105].

Emotional and psychological distress associated with severe illness and the prospect of transplantation can impair patients' decision-making abilities, often necessitating psychological support and counseling to navigate these complex emotions. Misinformation and misunderstanding about the transplant process, risks, and benefits can lead to confusion and poor decision-making, highlighting the need for clear, accurate, and comprehensive information [95].

Inadequate access to resources, such as educational materials and decision aids tailored to diverse populations, can prevent patients from fully understanding their options and participating in SDM [103]. Health system navigation challenges, particularly for patients with low health literacy or those unfamiliar with the system, can lead to delays in care and missed opportunities for SDM [101,106]. Additionally, socioeconomic and logistic barriers such as transportation difficulties, financial constraints, and lack of social support can impede patients' ability to attend appointments, access care, and engage in SDM [107].

4.2. Healthcare Professional-Related Barriers

HCPs' attitudes towards recipient eligibility and access to living donor kidney and liver transplantation can present challenges for SDM. Clinicians often balance the need for optimal recipient outcomes, donor protection, patient advocacy, and maintaining professional boundaries while navigating entrenched inequities such as the exclusivity of living donors, language barriers, center transparency, geographical disadvantage, and cultural barriers [102]. Furthermore, HCPs may aim to optimize organ utilization in a balanced manner, exercising rational professional judgment to determine what is most appropriate for the patient while considering the importance of organs as a limited public health resource [6,73]. Such attitudes can undermine efforts to engage patients in the decision-making process.

The decision to pursue kidney transplantation is often influenced by patients' perceptions of its outcomes [108]. Insufficient communication and inadequate information sharing, especially regarding transplant options compared to other treatments like dialysis, result in patients being less prepared to make treatment decisions aligned with their values [109]. Additionally, clinicians may lack adequate training to discuss prognosis, complicating the SDM process further [49]. Effective communication is essential for SDM, but gaps remain due to various factors involving both HCPs and patients. For instance, not all patients receive complete information about their options, revealing a broader communication challenge that can impact SDM [110]. Barriers to SDM are frequently based on misconceptions, such as the beliefs that SDM is a passing trend, that it forces patients to make decisions alone, or that it is too time-consuming. There are also misconceptions that not all patients desire SDM, that it is incompatible with clinical practice guidelines, or that it is too costly. However, evidence-based research refutes these myths, demonstrating that

SDM can improve healthcare quality without necessarily increasing costs or consultation time [111]. Addressing these barriers is essential for the effective integration of SDM into routine clinical practice.

4.3. Systemic Barriers

SDM in the SOT journey faces also system-level barriers. One prominent barrier is the complex and fragmented nature of healthcare systems, which may lead to poor coordination among different specialists and care teams. This fragmentation can result in inconsistent communication and conflicting information, making it challenging for patients to participate meaningfully in decision-making processes [112]. Additionally, institutional policies and resource constraints, such as limited consultation time and lack of access to decision aids, further hinder the implementation of SDM [6,36,73]. Cultural and organizational norms within healthcare institutions may also undervalue patient input, prioritizing clinician-driven decisions instead [9,113,114]. Furthermore, disparities in health literacy and socioeconomic status can exacerbate these barriers, as patients from disadvantaged backgrounds may have less access to information and support needed for SDM [107]. Time constraints limiting the time of medical consultations often restricts the opportunity for thorough discussions about treatment options, limiting the extent to which SDM can occur [115]. Person-centered outcomes are not consistently reported in trials for end-stage organ disease, limiting SDM [40,113,116].

Despite these challenges, improving SDM requires targeted interventions to empower both patients and clinical teams, ensuring equitable healthcare delivery. This includes clarifying transplant status, focusing on lifestyle and technical issues, and fostering a culture of trustful, safe therapeutic relationships where patients are empowered decision-makers [52,117]. Addressing communication gaps and enhancing the involvement of transplant coordinators and candidates in decision-making can further facilitate SDM [56].

5. Enabling Shared Decision-Making in Transplant Clinical Practice

Implementing SDM in transplant clinical practice is crucial to align patient care with individual preferences, values, and goals. This approach necessitates multifaceted interventions incorporating educational resources, patient engagement tools, clinician training, and policy development.

5.1. Educational Resources for Patients

Patients benefit from comprehensive but simply written materials about transplantation to support understanding [118], and tailored educational resources are essential for effective SDM [119,120]. For example, supports like web-based tools [25,121–125], question prompt sheets [126,127], best-case/worst-case communication guides [74], and patient decision aids [128] prepare patients for transplant discussions and help structure high-stakes conversations, focusing on patient values and long-term goals. However, while patient decision aids have been shown to increase knowledge and are generally well-received, there remains a gap in understanding their impact on non-knowledge-based outcomes, such as emotional readiness or decisional conflict. This gap underscores the need for further research to evaluate the comprehensive effectiveness of these tools in supporting SDM [128].

5.2. Prognostic Tools and Clinical Decision Aids

Prognostic tools, inclusive of patient-reported outcomes, support individualized care and treatment outcome information, supporting SDM across different organs [129–131]. For instance, models predicting survival in various conditions and mobile clinical decision aids enhance communication about treatment choices. Tools like risk indices and dynamic graft

failure predictions promote person-centered care by informing patients of their specific risks [56,132–134]. Additionally, incorporating measures like ‘days alive and out of the hospital’ into pre-transplant evaluations can improve patients’ understanding of post-transplant experiences and aid in SDM [135].

5.3. Clinician Training and Collaborative Care Models

Effective SDM relies on clinician education and collaborative care models. Programs teaching clinicians to use patient-reported outcomes are critical, and nurse-led interprofessional approaches improve transplant outcomes, emphasizing disease self-management and SDM [136,137]. Engagement in SDM is facilitated by reorganizing clinical care and educating providers and patients [6].

5.4. Policy Development and Clinical Practice Guidelines

Policy development and clinical practice guidelines may institutionalize SDM in transplant care and enhance providers’ ability to counsel their patients [1,4,14,24,138]. Integrating qualitative research into guidelines may further support structured, consistent, and transparent approaches to patient education and decision-making [139]. Transition clinics prepare patients for various care paths, emphasizing unbiased education and early referral [94]. Policies promoting transplant referral should strengthen SDM, ensuring decisions are explicit with clear communication of benefits, risks, and alternatives to transplant [1,3,95].

5.5. Use of Technology in SDM

Technological tools like mobile applications, videos, internet platforms, and artificial intelligence (AI) offer dynamic, personalized information to support SDM. For example, smartphone applications and computer systems may improve decision quality for patients along with their self-management abilities [23,140–143]. Internet-based programs and smart systems also have the potential to increase transplants and therapy uptake [15]. Despite the promise of AI, its impact on interactions among patients, their support networks, and HCPs remains largely unexplored [144]. Although empirical studies on AI’s influence on SDM are limited [145], ongoing research is investigating AI-based risk prediction’s role in physician–patient interactions [146].

5.6. Person-Centered Communication and Inclusion

Ensuring diversity, equity, and inclusion in SDM is paramount [4,14]. Engaging patients to identify and prioritize their values and needs is essential [147]. Addressing disparities in transplant access and providing clear information about treatment options has the potential to mitigate inequities in the whole process [13,109,148]. For example, to address the challenges posed by cultural and language differences, solutions such as access to medical interpreters, culturally relevant video resources, pre-visit materials in the patient’s preferred language, and home visits can enhance understanding and support more effective SDM [124,149–151]. Additionally, patient associations and community organizations can promote SDM by providing accessible educational resources, facilitating peer support, and advocating for policies that prioritize person-centered care. Through workshops, informative sessions, support networks, and sharing of firsthand experiences, these organizations may empower patients to make informed choices aligned with their values and preferences, fostering a collaborative and inclusive approach to decision-making across the transplant process [1,152].

Enabling SDM in transplant clinical practice requires a comprehensive approach integrating educational resources, prognostic tools, clinician training, collaborative care models, policy development, and technology. These interventions enhance patient engagement, in-

formed decision-making, and care alignment with patient values and goals. Future research should focus on assessing long-term clinical outcomes to evaluate these initiatives [153].

6. Discussion

Since the first article on SDM in deceased donor transplantation [5], the SOT literature has increasingly highlighted the importance of SDM as the best communication and decision-making model throughout the transplant journey. Studies focusing on different stages—from the diagnosis of end-stage organ disease and transplant referral to pre-transplant evaluations, the organ offer, perioperative care, and long-term follow-up—have consistently highlighted SDM as a continuous, dynamic process that adapts to the evolving context of each patient’s life and care plan [1–3,5,6]. This body of evidence suggests that SDM should not be viewed as a one-time event but rather as an ongoing, integral part of patient care that is critical at every stage of the transplant process [1–3,6,35] (Figure 1).

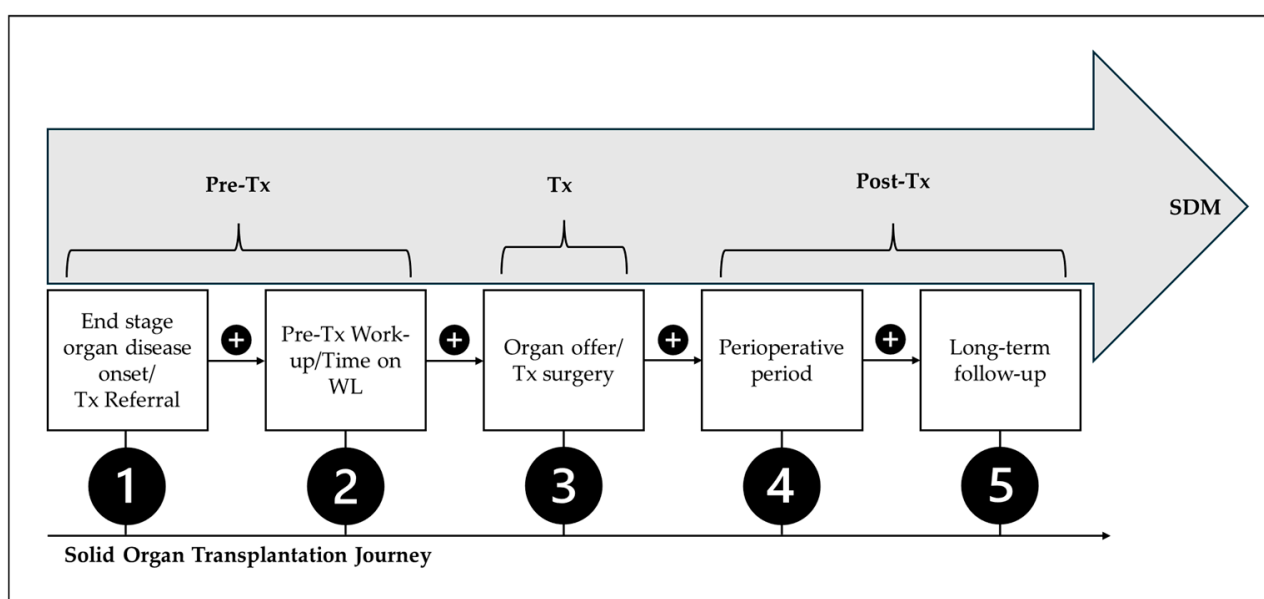


Figure 1. The Figure illustrates that SDM is an ongoing process that must be in place early on, since the time of (1) end-stage organ disease onset and transplant referral, to (2) pre-transplant work-up and time on the waiting list, through to (3) the organ offer/transplant surgery, (4) perioperative period, and (5) long-term post-transplant follow-up. Additionally, the Figure stresses that implementation of SDM in the earlier stages supports patient empowerment, with the potential for positive downstream effects on active patient engagement and participation, which can lead to increased transplant referrals, reduced anxiety, more realistic expectations, facilitated transitions into post-transplant life, and improved self-management abilities in the subsequent, interrelated stages of the solid organ transplant journey.

SDM, Shared Decision Making; Tx, Transplantation; WL, Waiting List

Cultivating a culture of SDM and person-centered care in SOT requires a multifaceted approach that addresses the needs and perspectives of all stakeholders involved [154,155]. HCPs must be trained in effective communication strategies, person-centered care, and SDM techniques, ensuring that they are equipped to engage patients and their families as active partners in the decision-making process [6]. At the organizational level, transplant centers should prioritize the integration of SDM into their policies, protocols, and workflows, creating an environment that supports and encourages meaningful patient and family engagement [4,6,14]. Additionally, the development and dissemination of high-quality educational resources and decision aids can empower patients and their families to be informed and active participants in their care [128,153]. By fostering a culture of

SDM, the transplant community can ensure that the unique needs, values, and preferences of each patient are at the forefront of the decision-making process, with the potential to ultimately lead to improved outcomes, enhanced patient satisfaction, and a stronger therapeutic partnership between patients, their families, and the HCPs who care for them [1–3,6]. Policymakers and regulatory bodies can also play a crucial role in promoting SDM in SOT by establishing guidelines, standards, and incentives that reinforce the importance of this approach [1,4,35]. By working collaboratively to address the barriers and challenges that can hinder the implementation of SDM, the transplant community can ensure that patients and their families are empowered to make informed decisions that align with their values, preferences, and goals. By comprehensively reviewing existing research, this paper highlights the critical need for SDM across all stages of SOT, underscoring its high potential in achieving more equitable, effective, and person-centered care.

Despite its comprehensive approach, several limitations should be acknowledged. First, while this review highlights the importance of SDM across the entire SOT journey, it does not delve deeply into the unique decision-making processes that vary by organ type. Each transplant type—such as kidney, liver, heart, or lung—presents distinct medical, psychological, and lifestyle considerations, and the absence of organ-specific focus may lead to gaps in understanding the particular challenges and decisions patients face within each transplant type. Additionally, the literature discussed here has not been systematically reviewed, which may result in selection bias and an incomplete picture of existing evidence. This limits the ability to draw firm conclusions about the effectiveness and nuances of SDM across different contexts. Future studies should include systematic reviews and empirical evaluations to better understand real-world implications, addressing these limitations and enabling more equitable, personalized approaches to transplant care.

7. Future Directions

As SOT practices progress, multiple avenues for future research emerge, emphasizing the need to enhance SDM and optimize patient outcomes. One crucial research area is the development and validation of comprehensive prognostic tools. These tools should integrate clinical, cognitive, and psychosocial variables to provide holistic assessments. Existing models often overlook the importance of patient-reported outcomes, which are critical for truly personalized care [129–131]. Research should aim to create predictive models that help clinicians and patients understand the potential benefits and risks of SOT, thereby supporting more informed decisions.

Another key direction is evaluating the long-term effects of SDM interventions on the clinical and psychosocial outcomes of SOT. Understanding its long-term impact can provide insights into how sustained patient engagement influences health trajectories and quality of life [156]. Studies should focus on various transplant contexts to identify commonalities and differences in the effectiveness of SDM.

The integration of technology into SDM practices is another promising research area. Artificial intelligence and other technologies can offer dynamic, personalized information that enhances patient engagement and decision quality [23,128,140]. Future research should explore how these technologies can overcome traditional barriers in SDM, such as time constraints and information overload, and how they can be integrated into everyday clinical workflows in a way that best meets clinicians' and patients' needs [145,146].

Effective SDM relies heavily on the skills and attitudes of HCPs [6,157]. Research should focus on developing and evaluating training programs that equip clinicians with the necessary skills for person-centered care and effective communication. These programs should emphasize the importance of understanding patient values and preferences and how to incorporate them into clinical decision-making.

Systemic change is essential for the widespread adoption of SDM. Future research should investigate how policy development and the integration of SDM into clinical guidelines and workflows can be achieved [1,3,4,95,114,139]. This includes exploring the impact of such policies on patient outcomes and healthcare equity [13]. The role of regulatory bodies in promoting and standardizing SDM practices across institutions is another critical area of study.

Research should also address the cultural and socioeconomic barriers that hinder effective SDM [100,102–105]. Understanding how these factors influence patient engagement and decision-making can help develop targeted interventions that promote equity in transplant care. This includes creating culturally sensitive educational materials and decision aids tailored to diverse patient populations [4,124].

Patient associations and community organizations represent another critical area for empirical study, as they may contribute to SDM by providing accessible educational resources, peer support, and advocacy for person-centered policies. Future research could explore how association-driven initiatives empower patients to make informed, value-aligned choices, fostering a collaborative, inclusive, and equitable approach throughout the transplant process.

Finally, the role of support systems in SDM should be a focus of future research. Family involvement is crucial in decision-making, especially for cognitively impaired or socioeconomically disadvantaged patients [97–99]. Studies should explore how to effectively engage families and leverage their support to improve patient outcomes and satisfaction.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflicts of interest.

References

1. European Directorate for the Quality of Medicines and Healthcare (EDQM). Communication of risk and shared decision-making. In *Guide to the Quality and Safety of Organs for Transplantation*, 8th ed.; Council of Europe: Strasbourg, France, 2022; pp. 493–511.
2. Grossi, A.A.; Nicoli, F.; de Feo, T.M.; Cardillo, M.; Biffa, G.; Pegoraro, R.; Petrini, C.; Torelli, R.; Puoti, F.; Rossini, G.; et al. The 3-T Model of Informed Consent for Nonstandard Risk Donors: A Proposal for Transplant Clinical Practice. *Transplant. Direct* **2021**, *7*, e782. [CrossRef] [PubMed]
3. Butler, C.R. A Critical Role for Shared Decision-Making about Referral and Evaluation for Kidney Transplant. *Kidney360* **2022**, *3*, 14–16. [CrossRef]
4. European Society of Organ Transplantation (ESOT). Tackling Inequalities in Organ Transplantation: A Pathway Forward. 2022. Available online: https://esot.org/wp-content/uploads/2022/10/EM012518_ESOT_ActionDay_ThinkTankReport_2201005_v0-8_FH.pdf (accessed on 2 January 2025).
5. Ross, L.F.; Zenios, S.; Thistlethwaite, J.R. Shared decision making in deceased-donor transplantation. *Lancet* **2006**, *368*, 333–337. [CrossRef] [PubMed]
6. Gordon, E.J.; Butt, Z.; Jensen, S.E.; Lok-Ming Lehr, A.; Franklin, J.; Becker, Y.; Sherman, L.; Chon, W.J.; Beauvais, N.; Hanneman, J.; et al. Opportunities for shared decision making in kidney transplantation. *Am. J. Transplant.* **2013**, *13*, 1149–1158. [CrossRef] [PubMed]
7. Barry, M.J.; Edgman-Levitan, S. Shared Decision Making—The Pinnacle of Patient-Centered Care. *N. Engl. J. Med.* **2012**, *366*, 780–781. [CrossRef]
8. Håkansson Eklund, J.; Holmström, I.K.; Kumlin, T.; Kaminsky, E.; Skoglund, K.; Högländer, J.; Sundler, A.J.; Condén, E.; Summer Meranius, M. “Same same or different?” A review of reviews of person-centered and patient-centered care. *Patient Educ. Couns.* **2019**, *102*, 3–11. [CrossRef]
9. Carbone, M.; Neuberger, J.; Rowe, I.; Polak, W.G.; Forsberg, A.; Fondevila, C.; Mantovani, L.; Nardi, A.; Colli, A.; Rockell, K.; et al. European Society for Organ Transplantation (ESOT) Consensus Statement on Outcome Measures in Liver Transplantation According to Value-Based Health Care. *Transpl. Int.* **2024**, *36*, 12190. [CrossRef]
10. Rickert, J.; Health Affairs Forefront. Patient-Centered Care: What It Means and How to Get There. Available online: <https://www.healthaffairs.org/doi/10.1377/forefront.20120124.016506/full/> (accessed on 11 March 2024).

11. Sewell, J.M.; Rimmer, C. Consent: Risk assessment, risk communication and shared decision making. *Surgery* **2022**, *40*, 351–355. [[CrossRef](#)]
12. Ladin, K.; Rodrigue, J.R.; Hanto, D.W. Framing disparities along the continuum of care from chronic kidney disease to transplantation: Barriers and interventions. *Am. J. Transplant.* **2009**, *9*, 669–674. [[CrossRef](#)] [[PubMed](#)]
13. Grossi, A.A.; Caselli, I.; Nicoli, F.; Ceruti, S.; Testa, J.; Tantardini, C.; Callegari, C.; Picozzi, M. Improving equity in the kidney transplant continuum for non-European-born patients living in Italy: Preliminary case-series findings of the contribution of pre-transplant ethical assessments. *Med. Morale* **2023**, *72*, 391–415. [[CrossRef](#)]
14. European Kidney Health Alliance. A Shared Vision for Improving Organ Donation and Transplantation in the EU. 2019. Available online: https://ekha.eu/wp-content/uploads/FINAL_Joint-Statement-of-the-Thematic-Network-on-Organ-Donation-and-Transplantation.pdf (accessed on 2 January 2025).
15. Lee, C.T.; Cheng, C.Y.; Yu, T.M.; Chung, M.C.; Hsiao, C.C.; Chen, C.H.; Wu, M.J. Shared Decision Making Increases Living Kidney Transplantation and Peritoneal Dialysis. *Transplant. Proc.* **2019**, *51*, 1321–1324. [[CrossRef](#)]
16. Schick-Makaroff, K.; Hays, R.E.; Hunt, J.; Taylor, L.A.; Rudow, D.L.P. Education Priorities and What Matters to Those Considering Living Kidney Donation. *Prog. Transplant.* **2021**, *31*, 32–39. [[CrossRef](#)] [[PubMed](#)]
17. Whitney, S.N.; McGuire, A.L.; McCullough, L.B. A Typology of Shared Decision Making, Informed Consent, and Simple Consent. *Ann. Intern. Med.* **2004**, *140*, 54–59. [[CrossRef](#)]
18. Elwyn, G.; Durand, M.A.; Song, J.; Aarts, J.; Barr, P.J.; Berger, Z.; Cochran, N.; Frosch, D.; Galasiński, D.; Gulbrandsen, P.; et al. A three-talk model for shared decision making: Multistage consultation process. *BMJ* **2017**, *359*, 4891. [[CrossRef](#)]
19. Abouna, G.M. Ethical issues in organ transplantation. *Med. Princ. Pract.* **2003**, *12*, 54–69. [[CrossRef](#)] [[PubMed](#)]
20. Dillworth, J.; Dickson, V.V.; Reyentovich, A.; Shedlin, M.G. Patient decision-making regarding left ventricular assist devices: A multiple case study. *Intensive Crit. Care Nurs.* **2019**, *51*, 7–14. [[CrossRef](#)]
21. Bansal, N.; Hailpern, S.M.; Katz, R.; Hall, Y.N.; Kurella Tamura, M.; Kreuter, W.; O'Hare, A.M. Outcomes Associated with Left Ventricular Assist Devices Among Recipients With and Without End-stage Renal Disease. *JAMA Intern. Med.* **2018**, *178*, 204–209. [[CrossRef](#)]
22. Cai, A.; Eisen, H.J. Ethical Considerations in the Long-Term Ventricular Assist Device Patient. *Curr. Heart Fail. Rep.* **2017**, *14*, 7–12. [[CrossRef](#)]
23. Wang, S.; Lu, Q.; Ye, Z.; Liu, F.; Yang, N.; Pan, Z.; Li, Y.; Li, L. Effects of a smartphone application named “Shared Decision Making Assistant” for informed patients with primary liver cancer in decision-making in China: A quasi-experimental study. *BMC Med. Inf. Decis. Mak.* **2022**, *22*, 145. [[CrossRef](#)] [[PubMed](#)]
24. Chaparro, C.; Hopkins, P.M.; Schwarz, C. Long needed guidelines: Referral to transplant for cystic fibrosis patients. *J. Cyst. Fibros.* **2019**, *18*, 305–306. [[CrossRef](#)]
25. Reid, N.; Ramos, K.J.; Hobler, M.R.; Bartlett, L.E.; Pryor, J.B.; Berry, D.L.; Basile, M.; Kapnadak, S.G.; Hartzler, A.L. Usability preferences of people living with cystic fibrosis about a lung transplant education website. *AMIA Annu. Symp. Proc.* **2022**, *2022*, 922–931. [[PubMed](#)]
26. Kiernan, E.; Wong, S.P.Y. Challenges to Informed, Patient-Centered, and Shared Decision Making for Treatment of Kidney Failure in Older Adults. *Am. J. Kidney Dis.* **2024**, *83*, 561–563. [[CrossRef](#)]
27. Kanbay, M.; Basile, C.; Battaglia, Y.; Mantovani, A.; Yavuz, F.; Pizzarelli, F.; Luyckx, V.A.; Covic, A.; Liakopoulos, V.; Mitra, S. Shared decision making in patients with kidney failure. *Nephrol. Dial. Transplant.* **2023**, *39*, 742–751. [[CrossRef](#)] [[PubMed](#)]
28. Kim, J.E.; Park, W.Y.; Kim, H. Renal Replacement Therapy For Elderly Patients with ESKD Through Shared Decision-Making. *Electrolyte Blood Press.* **2023**, *21*, 1–7. [[CrossRef](#)] [[PubMed](#)]
29. Lee, Y.K.; Kim, Y.H.; Kim, D.H.; Kim, J.H.; Lee, J.H.; Park, J.H.; Ko, G.J.; Hwang, W.M.; Gil, H.W.; Kang, Y.S.; et al. Shared decision-making intervention regarding dialysis modality in patients with CKD stage 5. *Medicine* **2023**, *102*, e33695. [[CrossRef](#)] [[PubMed](#)]
30. Perl, J.; Brown, E.A.; Chan, C.T.; Couchoud, C.; Davies, S.J.; Kazancioğlu, R.; Klarenbach, S.; Liew, A.; Weiner, D.E.; Cheung, M.; et al. Home dialysis: Conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) Controversies Conference. *Kidney Int.* **2023**, *103*, 842–858. [[CrossRef](#)] [[PubMed](#)]
31. Damron, K.C.; Friedman, R.; Inker, L.A.; Thompson, A.; Grams, M.E.; Guðmundsdóttir, H.; Willis, K.; Manley, T.; Heerspink, H.L.; Weiner, D.E. Treating Early-Stage CKD with New Medication Therapies: Results of a CKD Patient Survey Informing the 2020 NKF-FDA Scientific Workshop on Clinical Trial Considerations for Developing Treatments for Early Stages of Common, Chronic Kidney Diseases. *Kidney Med.* **2022**, *4*, 100442. [[CrossRef](#)] [[PubMed](#)]
32. Boulware, L.E.; Hill-Briggs, F.; Kraus, E.S.; Melancon, J.K.; McGuire, R.; Bonhage, B.; Senga, M.; Ephraim, P.; Evans, K.E.; Falcone, B.; et al. Protocol of a Randomized Controlled Trial of Culturally Sensitive Interventions to Improve African Americans' and Non-African Americans' Early, Shared, and Informed Consideration of Live Kidney Transplantation: The talking about Live Kidney Donation (TALK) Study. *BMC Nephrol.* **2011**, *12*, 34.

33. Ephraim, P.L.; Powe, N.R.; Rabb, H.; Ameling, J.; Auguste, P.; Lewis-Boyer, L.; Greer, R.C.; Crews, D.C.; Purnell, T.S.; Jaar, B.G.; et al. The providing resources to enhance African American patients' readiness to make decisions about kidney disease (PREPARED) study: Protocol of a randomized controlled trial. *BMC Nephrol.* **2012**, *13*, 135. [[CrossRef](#)]
34. Subramonian, A.; Frey, N. Conservative Management of Chronic Kidney Disease in Adult Patients: A Review of Clinical Effectiveness and Cost-Effectiveness. Available online: <https://www.cda-amc.ca/conservative-management-chronic-kidney-disease-adult-patients-review-clinical-effectiveness-and> (accessed on 2 January 2025).
35. Grossi, A.A.; Sever, M.S.; Hellemans, R.; Mariat, C.; Crespo, M.; Watschinger, B.; Peruzzi, L.; Demir, E.; Velioglu, A.; Gandolfini, I.; et al. The 3-Step Model of informed consent for living kidney donation: A proposal on behalf of the DESCaRTES Working Group of the European Renal Association. *Nephrol. Dial. Transplant.* **2023**, *38*, 1613–1622. [[CrossRef](#)]
36. Sheu, J.; Ephraim, P.L.; Powe, N.R.; Rabb, H.; Senga, M.; Evans, K.E.; Jaar, B.G.; Crews, D.C.; Greer, R.C.; Boulware, L.E. African American and non-African American patients' and families' decision making about renal replacement therapies. *Qual. Health Res.* **2012**, *22*, 997–1006. [[CrossRef](#)] [[PubMed](#)]
37. Ngamvichukorn, T.; Ruengorn, C.; Noppakun, K.; Thavorn, K.; Hutton, B.; Sood, M.M.; Knoll, G.A.; Nochaiwong, S. Association Between Pretransplant Dialysis Modality and Kidney Transplant Outcomes: A Systematic Review and Meta-analysis. *JAMA Netw. Open* **2022**, *5*, e2237580. [[CrossRef](#)] [[PubMed](#)]
38. Lu, E.; Chai, E. Kidney Supportive Care in Peritoneal Dialysis: Developing a Person-Centered Kidney Disease Care Plan. *Kidney Med.* **2022**, *4*, 100392. [[CrossRef](#)]
39. Carter, S.A.; Gutman, T.; Logeman, C.; Cattran, D.; Lightstone, L.; Bagga, A.; Barbour, S.J.; Barratt, J.; Boletis, J.; Caster, D.; et al. Identifying Outcomes Important to Patients with Glomerular Disease and Their Caregivers. *Clin. J. Am. Soc. Nephrol.* **2020**, *15*, 673–684. [[CrossRef](#)] [[PubMed](#)]
40. Cho, Y.; Sautenet, B.; Gutman, T.; Rangan, G.; Craig, J.C.; Ong, A.C.; Chapman, A.; Ahn, C.; Coolican, H.; Kao, J.T.; et al. Identifying patient-important outcomes in polycystic kidney disease: An international nominal group technique study. *Nephrology* **2019**, *24*, 1214–1224. [[CrossRef](#)] [[PubMed](#)]
41. Verberne, W.R.; Das-Gupta, Z.; Allegretti, A.S.; Bart, H.A.J.; van Biesen, W.; García-García, G.; Gibbons, E.; Parra, E.; Hemmeler, M.H.; Jager, K.J.; et al. Development of an International Standard Set of Value-Based Outcome Measures for Patients with Chronic Kidney Disease: A Report of the International Consortium for Health Outcomes Measurement (ICHOM) CKD Working Group. *Am. J. Kidney Dis.* **2019**, *73*, 372–384. [[CrossRef](#)] [[PubMed](#)]
42. Rao, I.R.; Vallath, N.; Anupama, Y.J.; Gupta, K.L.; Rao, K.S. Decision-making around Commencing Dialysis. *Indian J. Palliat. Care* **2021**, *27* (Suppl. S1), S6–S10. [[CrossRef](#)] [[PubMed](#)]
43. Dzou, T.; Eastwood, J.A.; Doering, L.; Pavlish, C.; Pieters, H. Theory of Pivoting Uncertainties: Advance Care Planning Among Individuals Living with Mechanical Circulatory Support. *J. Cardiovasc. Nurs.* **2024**, *39*, 142–152. [[CrossRef](#)]
44. Hamel, A.V.; Gaugler, J.E.; Porta, C.M.; Hadidi, N.N. Complex Decision-Making in Heart Failure: A Systematic Review and Thematic Analysis. *J. Cardiovasc. Nurs.* **2018**, *33*, 225–231. [[CrossRef](#)] [[PubMed](#)]
45. Reig, M.; Cabibbo, G. Antiviral therapy in the palliative setting of HCC (BCLC-B and -C). *J. Hepatol.* **2021**, *74*, 1225–1233. [[CrossRef](#)] [[PubMed](#)]
46. Marfil-Garza, B.A.; Hefler, J.; Verhoeff, K.; Lam, A.; Dajani, K.; Anderson, B.; O'Gorman, D.; Kin, T.; Bello-Chavolla, O.Y.; Grynoch, D.; et al. Pancreas and Islet Transplantation: Comparative Outcome Analysis of a Single-centre Cohort over 20-years. *Ann. Surg.* **2023**, *277*, 672–680. [[CrossRef](#)] [[PubMed](#)]
47. Ganji, S.; Ephraim, P.L.; Ameling, J.M.; Purnell, T.S.; Lewis-Boyer, L.L.; Boulware, L.E. Concerns regarding the financial aspects of kidney transplantation: Perspectives of pre-transplant patients and their family members. *Clin. Transplant.* **2014**, *28*, 1121–1130. [[CrossRef](#)]
48. Speight, J.; Woodcock, A.J.; Reaney, M.D.; Amiel, S.A.; Johnson, P.; Parrott, N.; Rutter, M.K.; Senior, P.; Shaw, J.A. Well, I Wouldn't be Any Worse Off, Would I, Than I am Now? A Qualitative Study of Decision-Making, Hopes, and Realities of Adults with Type 1 Diabetes Undergoing Islet Cell Transplantation. *Transpl. Direct.* **2016**, *2*, e72. [[CrossRef](#)]
49. Singh, P.; Germain, M.J.; Cohen, L.; Unruh, M. The elderly patient on dialysis: Geriatric considerations. *Nephrol. Dial. Transplant.* **2014**, *29*, 990–996. [[CrossRef](#)]
50. Dipchand, A.I. Decision-making in the face of end-stage organ failure: High-risk transplantation and end-of-life care. *Curr. Opin. Organ Transplant.* **2012**, *17*, 520–524. [[CrossRef](#)] [[PubMed](#)]
51. Jaramillo, C.; Braus, N. How Should ECMO Initiation and Withdrawal Decisions Be Shared? *AMA J. Ethics* **2019**, *21*, E387–E393. [[PubMed](#)]
52. Blumenthal-Barby, J.S.; Kostick, K.M.; Delgado, E.D.; Volk, R.J.; Kaplan, H.M.; Wilhelms, L.A.; McCurdy, S.A.; Estep, J.D.; Loebe, M.; Bruce, C.R. Assessment of patients' and caregivers' informational and decisional needs for left ventricular assist device placement: Implications for informed consent and shared decision-making. *J. Heart Lung Transplant.* **2015**, *34*, 1182–1189. [[CrossRef](#)] [[PubMed](#)]

53. Sledge, R.; Concepcion, B.P.; Witten, B.; Klicko, K.; Schatell, D. Kidney Failure Patients' Perceptions and Definitions of Health: A Qualitative Study. *Kidney Med.* **2023**, *5*, 100603. [[CrossRef](#)]
54. Gordon, E.J.; Reddy, E.; Ladner, D.P.; Friedewald, J.; Abecassis, M.M.; Ison, M.G. Kidney transplant candidates' understanding of increased risk donor kidneys: A qualitative study. *Clin. Transplant.* **2012**, *26*, 359–368. [[CrossRef](#)] [[PubMed](#)]
55. Moayedi, Y.; Ross, H.J.; Khush, K.K. Disclosure of infectious risk to heart transplant candidates: Shared decision-making is here to stay. *J. Heart Lung Transplant.* **2018**, *37*, 564–567. [[CrossRef](#)]
56. Mataya, L.; Aronsohn, A.; Thistlethwaite, J.R.J.; Friedman Ross, L. Decision making in liver transplantation—limited application of the liver donor risk index. *Liver Transplant.* **2014**, *20*, 831–837. [[CrossRef](#)]
57. Reese, P.P.; Tehrani, T.; Lim, M.A.; Asch, D.A.; Blumberg, E.A.; Simon, M.K.; Bloom, R.D.; Halpern, S.D. Determinants of the decision to accept a kidney from a donor at increased risk for blood-borne viral infection. *Clin. J. Am. Soc. Nephrol.* **2010**, *5*, 917–923. [[CrossRef](#)] [[PubMed](#)]
58. Op Den Dries, S.; Annema, C.; Berg APVDen Ranchor, A.V.; Porte, R.J. Shared decision making in transplantation: How patients see their role in the decision process of accepting a donor liver. *Liver Transplant.* **2014**, *20*, 1072–1080. [[CrossRef](#)] [[PubMed](#)]
59. van Hoogdalem, L.E.; Hoitsma, A.; Timman, R.; van der Zwart, R.; Körnmann, J.; van Rijssel, T.; Busschbach, J.J.V.; Ismail, S.Y. Shared Decision-Making in Kidney Patients: Involvement in Decisions Regarding the Quality of Deceased Donor Kidneys. *Transplant. Proc.* **2018**, *50*, 3152–3159. [[CrossRef](#)] [[PubMed](#)]
60. Jalbert, J.; Weller, J.N.; Boivin, P.L.; Lavigne, S.; Taobane, M.; Pieper, M.; Lodi, A.; Cardinal, H. Predicting Time to and Average Quality of Future Offers for Kidney Transplant Candidates Declining a Current Deceased Donor Kidney Offer: A Retrospective Cohort Study. *Can. J. Kidney Health Dis.* **2023**, *10*, 20543581231177844. [[CrossRef](#)]
61. Bitargil, M.; Haddad, O.; Pham, S.M.; Garg, N.; Jacob, S.; El-Sayed Ahmed, M.M.; Landolfo, K.; Patel, P.C.; Goswami, R.M.; Leoni Moreno, J.C.; et al. Packing the donor heart: Is SherpaPak cold preservation technique safer compared to ice cold storage. *Clin. Transplant.* **2022**, *36*, e14707. [[CrossRef](#)] [[PubMed](#)]
62. Wall, A.; Snoddy, M.; Du, J.; Bayer, J.; Danobeitia, S.; Lee, S.H.; Martinez, E.; Gupta, A.; Ran, G.; Parker, W.F.; et al. The current landscape of in situ and ex situ machine perfusion utilization for liver grafts from cardiac donation after circulatory death donors in the US. *Am. J. Transplant.* **2024**, *in press*. [[CrossRef](#)]
63. Hosgood, S.A.; Brown, R.J.; Nicholson, M.L. Advances in Kidney Preservation Techniques and Their Application in Clinical Practice. *Transplantation* **2021**, *105*, e202–e214. [[CrossRef](#)] [[PubMed](#)]
64. Pasrija, C.; Tipograf, Y.; Shah, A.S.; Trahanas, J.M. Normothermic regional perfusion for donation after circulatory death donors. *Curr. Opin. Organ Transplant.* **2023**, *28*, 71–75. [[CrossRef](#)]
65. UK Guidelines on Transplantation from Deceased Donors After Circulatory Death—British Transplantation Society. Available online: <https://bts.org.uk/transplantation-from-deceased-donors-after-circulatory-death/#recipient> (accessed on 11 November 2024).
66. Kögel, J.; Schmoeckel, M.; Marckmann, G. Who shall go first? A multicriteria approach to patient selection for first clinical trials of cardiac xenotransplantation. *J. Med. Ethics* **2024**, jme-2024-110056. [[CrossRef](#)]
67. Volk, M.L.; Tocco, R.S.; Pelletier, S.J.; Zikmund-Fisher, B.J.; Lok, A.S.F. Patient decision making about organ quality in liver transplantation. *Liver Transplant.* **2011**, *17*, 1387–1393. [[CrossRef](#)]
68. Eckman, M.H.; Adejare, A.A.; Duncan, H.; Woodle, E.S.; Thakar, C.V.; Alloway, R.R.; Sherman, K.E. Incorporating Patients' Values and Preferences Into Decision Making About Transplantation of HCV-Naïve Recipients with Kidneys From HCV-Viremic Donors: A Feasibility Study. *MDM Policy Pract.* **2021**, *6*, 23814683211056536. [[CrossRef](#)] [[PubMed](#)]
69. Couri, T.; Cotter, T.G.; Chen, D.; Hammes, M.; Reddy, B.; Josephson, M.; Yeh, H.; Chung, R.T.; Paul, S. Use of Hepatitis C Positive Organs: Patient Attitudes in Urban Chicago. *Am. J. Nephrol.* **2019**, *49*, 32–40. [[CrossRef](#)]
70. Schlendorf, K.H.; Zalawadiya, S.; Shah, A.S.; Perri, R.; Wigger, M.; Brinkley, D.M.; Danter, M.R.; Menachem, J.N.; Punnoose, L.R.; Balsara, K.; et al. Expanding Heart Transplant in the Era of Direct-Acting Antiviral Therapy for Hepatitis C. *JAMA Cardiol.* **2020**, *5*, 167–174. [[CrossRef](#)] [[PubMed](#)]
71. Saine, M.E.; Schnellinger, E.M.; Liu, M.; Diamond, J.M.; Crespo, M.M.; Prenner, S.; Potluri, V.; Bermudez, C.; Mentch, H.; Moore, M.; et al. Decision-making Among Hepatitis C Virus-negative Transplant Candidates Offered Organs from Donors with HCV Infection. *Transpl. Direct.* **2022**, *8*, e1341. [[CrossRef](#)] [[PubMed](#)]
72. Chaudhry, S.P.; Salerno, C.T.; Ravichandran, A.K.; Walsh, M.N. Shared Decision Making in Cardiac Transplantation During the COVID-19 Pandemic: Patient Refusal of Transplantation. *JACC Case Rep.* **2020**, *2*, 1365–1367. [[CrossRef](#)]
73. Cardinal, H.; Ballesteros Gallego, F.; Affdal, A.; Fortin, M.C. Canadian transplant nephrologists' perspectives on the decision-making process for accepting or refusing a kidney from a deceased organ donor. *Clin. Transplant.* **2020**, *34*, e13793. [[CrossRef](#)]
74. Hightet, A.; Cassidy, D.E.; Gomez-Rexrode, A.E.; Kirsch, M.J.; Eton, R.; Brown, C.S.; Waits, S.A.; Englesbe, M.J. Introduction to the Best-Case/Worst-Case Framework Within Transplantation Surgery to Improve Decision-Making for Increased Risk Donor Organ Offers. *Prog. Transplant.* **2020**, *30*, 368–371. [[CrossRef](#)] [[PubMed](#)]

75. King, K.L.; Husain, S.A.; Schold, J.D.; Patzer, R.E.; Reese, P.P.; Jin, Z.; Ratner, L.E.; Cohen, D.J.; Pastan, S.O.; Mohan, S. Major Variation across Local Transplant Centers in Probability of Kidney Transplant for Wait-Listed Patients. *J. Am. Soc. Nephrol.* **2020**, *31*, 2900–2911. [[CrossRef](#)]
76. Eccher, A.; Girolami, I.; Motter, J.D.; Marletta, S.; Gambaro, G.; Momo, R.E.N.; Nacchia, F.; Donato, P.; Boschiero, L.; Boggi, U.; et al. Donor-transmitted cancer in kidney transplant recipients: A systematic review. *J. Nephrol.* **2020**, *33*, 1321–1332. [[CrossRef](#)] [[PubMed](#)]
77. Grossi, A.A.; De Feo, T.M.; Ambrosini, A.; Picozzi, M. Shared decision-making and disclosure of adverse events: Critical aspects for the quality and safety of kidney transplant practice. *J. Nephrol.* **2021**, *1*, 1–3. [[CrossRef](#)] [[PubMed](#)]
78. Ferrándiz-Pulido, C.; Leiter, U.; Harwood, C.; Proby, C.M.; Guthoff, M.; Scheel, C.H.; Westhoff, T.H.; Bouwes Bavinck, J.N.; Meyer, T.; Nägeli, M.C.; et al. Immune Checkpoint Inhibitors in Solid Organ Transplant Recipients with Advanced Skin Cancers—Emerging Strategies for Clinical Management. *Transplantation* **2023**, *107*, 1452–1462. [[CrossRef](#)] [[PubMed](#)]
79. Murakami, N.; Reich, A.J.; Pavlakis, M.; Lakin, J.R. Conservative Kidney Management in Kidney Transplant Populations. *Semin. Nephrol.* **2023**, *43*, 151401. [[CrossRef](#)]
80. Ergisi, M.; Ooi, B.; Salim, O.; Papalois, V. Post-transplant lymphoproliferative disorders following kidney transplantation: A literature review with updates on risk factors, prognostic indices, screening strategies, treatment and analysis of donor type. *Transpl. Rev.* **2024**, *38*, 100837. [[CrossRef](#)]
81. Schmidt, T.; Reiss, N.; Olbrich, E.; Chalabi, K.; Hagedorn, T.; Tetzlaff, K. Scuba diving after a heart transplant: Excessive daring or calculable risk? *Am. J. Physiol. Heart Circ. Physiol.* **2023**, *325*, H569–H577. [[CrossRef](#)]
82. Kittleson, M.M.; DeFilippis, E.M.; Bhagra, C.J.; Casale, J.P.; Cauldwell, M.; Coscia, L.A.; D’Souza, R.; Gaffney, N.; Gerovasili, V.; Ging, P.; et al. Reproductive health after thoracic transplantation: An ISHLT expert consensus statement. *J. Heart Lung Transplant.* **2023**, *42*, e1–e42. [[CrossRef](#)] [[PubMed](#)]
83. Walsh, M.N. Pregnancy with Left Ventricular Assist Device and after Heart Transplantation: An Important Opportunity for Shared Decision Making. *J. Card. Fail.* **2021**, *27*, 188–189. [[CrossRef](#)] [[PubMed](#)]
84. Tong, A.; Brown, M.A.; Winkelmayer, W.C.; Craig, J.C.; Jesudason, S. Perspectives on Pregnancy in Women with CKD: A Semistructured Interview Study. *Am. J. Kidney Dis.* **2015**, *66*, 951–961. [[CrossRef](#)] [[PubMed](#)]
85. Bhagra, C.J.; Cherikh, W.S.; Ross, H.; Kittleson, M.M.; Stehlik, J.; Lewis, A.; DeFilippis, E.M.; Macera, F. Informing preconception counseling: Outcomes among female heart transplant recipients in the ISHLT registry. *J. Heart Lung Transplant.* **2023**, *43*, 727–736. [[CrossRef](#)] [[PubMed](#)]
86. Iltis, A.S.; Mehta, M.; Sawinski, D. Ignorance is Not Bliss: The Case for Comprehensive Reproductive Counseling for Women with Chronic Kidney Disease. *HEC Forum.* **2023**, *35*, 223–236. [[CrossRef](#)] [[PubMed](#)]
87. McIntosh, T.; Puerzer, P.; Li, M.T.; Malat, G.; Sammons, C.; Norris, M.; Fallah, T.; Trofe-Clark, J.; DuBois, J.M.; Iltis, A.; et al. A survey of solid organ transplant recipient attitudes and concerns regarding contraception and pregnancy. *Clin. Transplant.* **2023**, *37*, e14948. [[CrossRef](#)] [[PubMed](#)]
88. NHS England. Guide to Implementing Personalised Follow-Up for Kidney Transplant Recipients. 2023. Available online: <https://www.england.nhs.uk/long-read/guide-to-implementing-personalised-follow-up-for-kidney-transplant-recipients/> (accessed on 10 November 2024).
89. Wright, L.; Pape, D.; Ross, K.; Campbell, M.; Bowman, K. Approaching end-of-life care in organ transplantation: The impact of transplant patients’ death and dying. *Prog. Transplant.* **2007**, *17*, 57–61. [[CrossRef](#)]
90. Taylor, D.M.; Bradley, J.A.; Bradley, C.; Draper, H.; Johnson, R.; Metcalfe, W.; Oniscu, G.; Robb, M.; Tomson, C.; Watson, C.; et al. Limited health literacy in advanced kidney disease. *Kidney Int.* **2016**, *90*, 685–695. [[CrossRef](#)]
91. Forneris, G.; Boero, R.; Massara, C.; Quarello, F. Immigrants and dialysis: A survey in Piedmont. *G. Ital. Nefrol.* **2011**, *28*, 314–318.
92. Poulakou, G.; Len, O.; Akova, M. Immigrants as donors and transplant recipients: Specific considerations. *Intensive Care Med.* **2019**, *45*, 401–403. [[CrossRef](#)] [[PubMed](#)]
93. Bailey, P.K.; Ben-Shlomo, Y.; Tomson, C.R.V.; Owen-Smith, A. Socioeconomic deprivation and barriers to live-donor kidney transplantation: A qualitative study of deceased-donor kidney transplant recipients. *BMJ Open* **2016**, *6*, e010605. [[CrossRef](#)] [[PubMed](#)]
94. Evans, M.; Lopau, K. The transition clinic in chronic kidney disease care. *Nephrol Dial Transplant.* **2020**, *35* (Suppl. S2), ii4–ii10. [[CrossRef](#)] [[PubMed](#)]
95. Butler, C.R.; Taylor, J.S.; Reese, P.P.; O’Hare, A.M. Thematic analysis of the medical records of patients evaluated for kidney transplant who did not receive a kidney. *BMC Nephrol.* **2020**, *21*, 300. [[CrossRef](#)] [[PubMed](#)]
96. Drew, D.A.; Weiner, D.E.; Sarnak, M.J. Cognitive Impairment in CKD: Pathophysiology, Management, and Prevention. *Am. J. Kidney Dis.* **2019**, *74*, 782–790. [[CrossRef](#)]
97. Hart, A.; Bruin, M.; Chu, S.; Matas, A.; Partin, M.R.; Israni, A.K. Decision support needs of kidney transplant candidates regarding the deceased donor waiting list: A qualitative study and conceptual framework. *Clin. Transplant.* **2019**, *33*, e13530. [[CrossRef](#)] [[PubMed](#)]

98. Mcpeake, M.L.; Cook, N.; Mcilpatrick, S.; Hasson, F. The experience of shared decision-making for patients with end-stage kidney disease undergoing haemodialysis and their families—A scoping review. *J. Clin. Nurs.* **2023**, *32*, 6243–6253. [[CrossRef](#)] [[PubMed](#)]
99. Mahdzadeh, A.; Oskouie, F.; Khanjari, S.; Parvizy, S. The need for renovating patient education in kidney transplantation: A qualitative study. *J. Educ. Health Promot.* **2020**, *9*, 154. [[PubMed](#)]
100. Walker, R.C.; Abel, S.; Reynolds, A.; Palmer, S.C.; Walker, C.; Tipene-Leach, D.C. Experiences, perspectives and values of Indigenous peoples regarding kidney transplantation: Systematic review and thematic synthesis of qualitative studies. *Int. J. Equity Health* **2019**, *18*, 204. [[CrossRef](#)]
101. Grossi, A.A.; Puoti, F.; Masiero, L.; Troni, A.; Cianchi, T.; Maggiore, U.; Cardillo, M. Inequities in organ donation and transplantation among immigrant populations in Italy: A narrative review of evidence, gaps in research and potential areas for intervention. *Transpl. Int.* **2023**, *36*, 11216. [[CrossRef](#)] [[PubMed](#)]
102. Hanson, C.S.; Chadban, S.J.; Chapman, J.R.; Craig, J.C.; Wong, G.; Tong, A. Nephrologists' perspectives on recipient eligibility and access to living kidney donor transplantation. *Transplantation* **2016**, *100*, 943–953. [[CrossRef](#)]
103. Timmerman, L.; Ismail, S.Y.; Luchtenburg, A.E.; Zuidema, W.C.; Ijzermans, J.N.M.; Busschbach, J.J.V.; Weimar, W.; Massey, E.K. Exploring Knowledge About Dialysis, Transplantation, and Living Donation Among Patients and Their Living Kidney Donors. *Int. J. Behav. Med.* **2015**, *22*, 580–589. [[CrossRef](#)] [[PubMed](#)]
104. de Moissac, D.; Bowen, S. Impact of Language Barriers on Quality of Care and Patient Safety for Official Language Minority Francophones in Canada. *J. Patient Exp.* **2019**, *6*, 24–32. [[CrossRef](#)]
105. Suurmond, J.; Seeleman, C. Shared decision-making in an intercultural context: Barriers in the interaction between physicians and immigrant patients. *Patient Educ. Couns.* **2006**, *60*, 253–259. [[CrossRef](#)]
106. Grossi, A.A.; Puoti, F.; Fiaschetti, P.; Di Ciaccio, P.; Maggiore, U.; Cardillo, M. Kidney transplantation and withdrawal rates among wait-listed first-generation immigrants in Italy. *Eur. J. Public Health* **2022**, *32*, 372–378. [[CrossRef](#)] [[PubMed](#)]
107. Garner, L. Distance from a transplant center and getting listed for a transplant. *Clin. J. Am. Soc. Nephrol.* **2020**, *15*, 439–440. [[CrossRef](#)] [[PubMed](#)]
108. Senghor, A.S. Reasons for dialysis patients choosing or refusing kidney transplantation as renal replacement therapy: A qualitative study. *Nephrol. Ther.* **2019**, *15*, 511–516. [[CrossRef](#)]
109. Barrett, T.M.; Davenport, C.A.; Ephraim, P.L.; Peskoe, S.; Mohottige, D.; DePasquale, N.; McElroy, L.; Boulware, L.E. Disparities in Discussions about Kidney Replacement Therapy in CKD Care. *Kidney360* **2022**, *3*, 158–163. [[CrossRef](#)] [[PubMed](#)]
110. Hamroun, A.; Glowacki, F.; Frimat, L. Comprehensive conservative care: What doctors say, what patients hear. *Nephrol. Dial. Transplant.* **2023**, *38*, 2428–2443. [[CrossRef](#)] [[PubMed](#)]
111. Légaré, F.; Thompson-Leduc, P. Twelve myths about shared decision making. *Patient Educ. Couns.* **2014**, *96*, 281–286. [[CrossRef](#)] [[PubMed](#)]
112. Horton, A.; Loban, K.; Fortin, M.C.; Charbonneau, S.; Nugus, P.; Pâquet, M.R.; Chaudhury, P.; Cantarovich, M.; Sandal, S. Living Donor Kidney Transplantation in Quebec: A Qualitative Case Study of Health System Barriers and Facilitators. *Can. J. Kidney Health Dis.* **2023**, *10*, 20543581221150675. [[CrossRef](#)] [[PubMed](#)]
113. Brett, K.E.; Ritchie, L.J.; Ertel, E.; Bennett, A.; Knoll, G.A. Quality Metrics in Solid Organ Transplantation: A Systematic Review. *Transplantation* **2018**, *102*, e308–e330. [[CrossRef](#)]
114. Cassidy, B.P.; Getchell, L.E.; Harwood, L.; Hemmett, J.; Moist, L.M. Barriers to Education and Shared Decision Making in the Chronic Kidney Disease Population: A Narrative Review. *Can. J. Kidney Health Dis.* **2018**, *5*, 1–11. [[CrossRef](#)] [[PubMed](#)]
115. Schulz, K.H.; Kroencke, S. Psychosocial challenges before and after organ transplantation. *Transpl. Res. Risk Manag.* **2015**, *7*, 45–58. [[CrossRef](#)]
116. Weisenburger, G.; Gault, N.; Roux, A.; Tran-Dinh, A.; Bunel, V.; Godet, C.; Mordant, P.; Montravers, P.; Castier, Y.; Mal, H.; et al. Patient-important outcomes in lung transplantation: A systematic review. *Respir. Med. Res.* **2022**, *81*, 100896. [[CrossRef](#)] [[PubMed](#)]
117. Vucicevic, D.; Honoris, L.; Raia, F.; Deng, M. Current indications for transplantation: Stratification of severe heart failure and shared decision-making. *Ann. Cardiothorac. Surg.* **2018**, *7*, 56–66. [[CrossRef](#)] [[PubMed](#)]
118. Gordon, E.J.; Bergeron, A.; McNatt, G.; Friedewald, J.; Abecassis, M.M.; Wolf, M.S. Are informed consent forms for organ transplantation and donation too difficult to read? *Clin. Transplant.* **2012**, *26*, 275–283. [[CrossRef](#)]
119. Bhattad, P.B.; Pacifico, L. Empowering Patients: Promoting Patient Education and Health Literacy. *Cureus* **2022**, *14*, e27336. [[CrossRef](#)]
120. Boulware, L.E.; Ephraim, P.L.; Ameling, J.; Lewis-Boyer, L.; Rabb, H.; Greer, R.C.; Crews, D.C.; Jaar, B.G.; Auguste, P.; Purnell, T.S.; et al. Effectiveness of informational decision aids and a live donor financial assistance program on pursuit of live kidney transplants in African American hemodialysis patients. *BMC Nephrol.* **2018**, *19*, 107. [[CrossRef](#)]
121. Waterman, A.D.; Peipert, J.D.; Cui, Y.; Beaumont, J.L.; Paiva, A.; Lipsey, A.F.; Anderson, C.S.; Robbins, M.L. Your Path to Transplant: A randomized controlled trial of a tailored expert system intervention to increase knowledge, attitudes, and pursuit of kidney transplant. *Am. J. Transplant.* **2021**, *21*, 1186–1196. [[CrossRef](#)] [[PubMed](#)]

122. Hartzler, A.L.; Bartlett, L.E.; Hobler, M.R.; Reid, N.; Pryor, J.B.; Kapnadak, S.G.; Berry, D.L.; Lober, W.B.; Goss, C.H.; Ramos, K.J.; et al. Take on transplant: Human-centered design of a patient education tool to facilitate informed discussions about lung transplant among people with cystic fibrosis. *J. Am. Med. Inf. Assoc.* **2022**, *30*, 26–37. [[CrossRef](#)] [[PubMed](#)]
123. Kayler, L.K.; Nie, J.; Solbu, A.; Handmacher, M.; Feeley, T.H.; Noyes, K. Feasibility of providing web-based education to patients prior to kidney transplant evaluation. *Clin. Transplant.* **2024**, *38*, e15174. [[CrossRef](#)] [[PubMed](#)]
124. Gordon, E.J.; Feinglass, J.; Carney, P.; Vera, K.; Olivero, M.; Black, A.; O'Connor, K.; MacLean, J.; Nichols, S.; Sageshima, J.; et al. A culturally targeted website for hispanics/latinos about living kidney donation and transplantation: A randomized controlled trial of increased knowledge. *Transplantation* **2016**, *100*, 1149–1160. [[CrossRef](#)]
125. Volk, M.L.; Roney, M.; Fagerlin, A. Pilot test of a patient decision aid about liver transplant organ quality. *Liver Transplant.* **2014**, *20*, 850–855. [[CrossRef](#)] [[PubMed](#)]
126. Sansoni, J.E.; Grootemaat, P.; Duncan, C. Question Prompt Lists in health consultations: A review. *Patient Educ. Couns.* **2015**, *98*, 1454–1464. [[CrossRef](#)] [[PubMed](#)]
127. Lederer, S.; Fischer, M.J.; Gordon, H.S.; Wadhwa, A.; Popli, S.; Gordon, E.J. A question prompt sheet for adult patients with chronic kidney disease. *BMC Nephrol.* **2016**, *17*, 155. [[CrossRef](#)]
128. Irish, G.L.; Weightman, A.; Hersch, J.; Coates, P.T.; Clayton, P.A. Do patient decision aids help people who are facing decisions about solid organ transplantation? A systematic review. *Clin. Transplant.* **2023**, *37*, e14928. [[CrossRef](#)] [[PubMed](#)]
129. Milders, J.; Ramspek, C.L.; Janse, R.J.; Bos, W.J.W.; Rotmans, J.I.; Dekker, F.W.; van Diepen, M. Prognostic Models in Nephrology: Where Do We Stand and Where Do We Go from Here? Mapping Out the Evidence in a Scoping Review. *J. Am. Soc. Nephrol.* **2024**, *35*, 367–380. [[CrossRef](#)] [[PubMed](#)]
130. Meyers, D.E.; Goodlin, S.J. End-of-Life Decisions and Palliative Care in Advanced Heart Failure. *Can. J. Cardiol.* **2016**, *32*, 1148–1156. [[CrossRef](#)]
131. Bansal, A.D.; Patel, A.A. Dialysis initiation for patients with decompensated cirrhosis when liver transplant is unlikely. *Curr. Opin. Nephrol. Hypertens.* **2024**, *33*, 212–219. [[CrossRef](#)] [[PubMed](#)]
132. Fournier, M.C.; Foucher, Y.; Blanche, P.; Legendre, C.; Girerd, S.; Ladrrière, M.; Morelon, E.; Buron, F.; Rostaing, L.; Kamar, N.; et al. Dynamic predictions of long-term kidney graft failure: An information tool promoting patient-centred care. *Nephrol. Dial. Transplant.* **2019**, *34*, 1961–1969. [[CrossRef](#)] [[PubMed](#)]
133. Hajizadeh, N.; Zhang, M.; Akerman, M.; Kohn, N.; Mathew, A.; Hadjiliadis, D.; Wang, J.; Lesser, M.L. Survival models to support shared decision-making about advance care planning for people with advanced stage cystic fibrosis. *BMJ Open Respir. Res.* **2021**, *8*, e000794. [[CrossRef](#)] [[PubMed](#)]
134. Patzer, R.E.; Basu, M.; Mohan, S.; Smith, K.D.; Wolf, M.; Ladner, D.; Friedewald, J.J.; Chiles, M.; Russell, A.; McPherson, L.; et al. A Randomized Controlled Trial of a Mobile Clinical Decision Aid to Improve Access to Kidney Transplantation: iChoose Kidney. *Kidney Int. Rep.* **2016**, *1*, 34–42. [[CrossRef](#)]
135. Bruce, M.R.; Frasco, P.E.; Sell-Dottin, K.A.; Cuevas, C.V.; Chang, Y.H.H.; Lim, E.S.; Rosenthal, J.L.; DeValeria, P.A.; Smith, B.B. Days Alive and Out of the Hospital After Heart Transplantation: A Retrospective Cohort Study. *J. Cardiothorac. Vasc. Anesth.* **2024**, *38*, 93–100. [[CrossRef](#)]
136. Santana, M.J.; Haverman, L.; Absolom, K.; Takeuchi, E.; Feeny, D.; Grootenhuis, M.; Velikova, G. Training clinicians in how to use patient-reported outcome measures in routine clinical practice. *Qual. Life Res.* **2015**, *24*, 1707–1718. [[CrossRef](#)] [[PubMed](#)]
137. Bissonnette, J.; Woodend, K.; Davies, B.; Stacey, D.; Knoll, G.A. Evaluation of a collaborative chronic care approach to improve outcomes in kidney transplant recipients. *Clin. Transplant.* **2013**, *27*, 232–238. [[CrossRef](#)] [[PubMed](#)]
138. Ramos, K.J.; Smith, P.J.; McKone, E.F.; Pilewski, J.M.; Lucy, A.; Hempstead, S.E.; Tallarico, E.; Faro, A.; Rosenbluth, D.B.; Gray, A.L.; et al. Lung transplant referral for individuals with cystic fibrosis: Cystic Fibrosis Foundation consensus guidelines. *J. Cyst. Fibros.* **2019**, *18*, 321–333. [[CrossRef](#)]
139. Tong, A.; Morton, R.L.; Webster, A.C. How Qualitative Research Informs Clinical and Policy Decision Making in Transplantation: A Review. *Transplantation* **2016**, *100*, 1997–2005. [[CrossRef](#)]
140. Clement, J.; Maldonado, A.Q. Augmenting the Transplant Team with Artificial Intelligence: Toward Meaningful AI Use in Solid Organ Transplant. *Front. Immunol.* **2021**, *12*, 694222. [[CrossRef](#)] [[PubMed](#)]
141. Patzer, R.E.; McPherson, L.; Basu, M.; Mohan, S.; Wolf, M.; Chiles, M.; Russell, A.; Gander, J.C.; Friedewald, J.J.; Ladner, D.; et al. Effect of the iChoose Kidney decision aid in improving knowledge about treatment options among transplant candidates: A randomized controlled trial. *Am. J. Transplant.* **2018**, *18*, 1954–1965. [[CrossRef](#)] [[PubMed](#)]
142. Eslami, S.; Khoshrounejad, F.; Golmakani, R.; Taherzadeh, Z.; Tohidinezhad, F.; Mostafavi, S.M.; Ganjali, R. Effectiveness of IT-based interventions on self-management in adult kidney transplant recipients: A systematic review. *BMC Med. Inform. Decis. Mak.* **2021**, *21*, 2. [[CrossRef](#)] [[PubMed](#)]
143. Poureslami, I.; Kwan, S.; Lam, S.; Khan, N.A.; Fitzgerald, J.M. Assessing the effect of culturally specific audiovisual educational interventions on attaining self-management skills for chronic obstructive pulmonary disease in Mandarin- and Cantonese-speaking patients: A randomized controlled trial. *Int. J. Chron. Obs. Pulmon Dis.* **2016**, *11*, 1811–1822. [[CrossRef](#)] [[PubMed](#)]

144. Ho, C.W.L.; Caals, K. A Call for an Ethics and Governance Action Plan to Harness the Power of Artificial Intelligence and Digitalization in Nephrology. *Semin. Nephrol.* **2021**, *41*, 282–293. [CrossRef]
145. Rahimi, S.A.; Cwintal, M.; Huang, Y.; Ghadiri, P.; Grad, R.; Poenaru, D.; Gore, G.; Zomahoun, H.T.V.; Légaré, F.; Pluye, P. Application of Artificial Intelligence in Shared Decision Making: Scoping Review. *JMIR Med. Inform.* **2022**, *10*, e36199. [CrossRef] [PubMed]
146. Osmanodja, B.; Sassi, Z.; Eickmann, S.; Hansen, C.M.; Roller, R.; Burchardt, A.; Samhammer, D.; Dabrock, P.; Möller, S.; Budde, K.; et al. Investigating the Impact of AI on Shared Decision-Making in Post-Kidney Transplant Care (PRIMA-AI): Protocol for a Randomized Controlled Trial. *JMIR Res. Protoc.* **2024**, *13*, e54857. [CrossRef] [PubMed]
147. Rhee, C.M.; Edwards, D.; Ahdoot, R.S.; Burton, J.O.; Conway, P.T.; Fishbane, S.; Gallego, D.; Gallieni, M.; Gedney, N.; Hayashida, G.; et al. Living Well with Kidney Disease and Effective Symptom Management: Consensus Conference Proceedings. *Kidney Int. Rep.* **2022**, *7*, 1951–1963. [CrossRef]
148. Husain, S.A.; Brennan, C.; Michelson, A.; Tsapepas, D.; Patzer, R.E.; Schold, J.D.; Mohan, S. Patients prioritize waitlist over posttransplant outcomes when evaluating kidney transplant centers. *Am. J. Transplant.* **2018**, *18*, 2781–2790. [CrossRef] [PubMed]
149. Vignaroli, K.A.; Brandenberger, J.C.; Kaplan, S.J. Lost in Translation: Waitlist Status in Kidney Transplant Patients Requiring a Translator. *J. Am. Coll. Surg.* **2021**, *233*, e199. [CrossRef]
150. Ismail, S.Y.; Luchtenburg, A.E.; Timman, R.; Zuidema, W.C.; Boonstra, C.; Weimar, W.; Busschbach, J.J.; Massey, E.K. Home-based family intervention increases knowledge, communication and living donation rates: A randomized controlled trial. *Am. J. Transplant.* **2014**, *14*, 1862–1869. [CrossRef]
151. Kayler, L.K.; Keller, M.M.; Crenesse-Cozien, N.; Dolph, B.; Cadzow, R.; Feeley, T.H. Development and preliminary evaluation of ilearnKAS: An animated video about kidney allocation to support transplant decision-making. *Clin. Transplant.* **2019**, *33*, e13638. [CrossRef] [PubMed]
152. European Patients Forum (EPF). Toolkit for Patient Organisations on Patient Empowerment. 2017. Available online: <https://www.eu-patient.eu/globalassets/library/publications/patient-empowerment---toolkit.pdf> (accessed on 10 November 2024).
153. Hamid, M.; Rogers, E.; Chawla, G.; Gill, J.; MacAnovic, S.; Mucsi, I. Pretransplant Patient Education in Solid-organ Transplant: A Narrative Review. *Transplantation* **2022**, *106*, 722–733. [CrossRef]
154. Dennison Himmelfarb, C.R.; Koirala, B.; Coke, L.A. Shared Decision Making: Partnering with Patients to Improve Cardiovascular Care and Outcomes. *J. Cardiovasc. Nurs.* **2018**, *33*, 301–303. [CrossRef] [PubMed]
155. Bokhour, B.G.; Fix, G.M.; Mueller, N.M.; Barker, A.M.; LaVela, S.L.; Hill, J.N.; Solomon, J.L.; Lukas, C.V. How can healthcare organizations implement patient-centered care? Examining a large-scale cultural transformation. *BMC Health Serv. Res.* **2018**, *18*, 168. [CrossRef] [PubMed]
156. Marzban, S.; Najafi, M.; Agolli, A.; Ashrafi, E. Impact of Patient Engagement on Healthcare Quality: A Scoping Review. *J. Patient Exp.* **2022**, *9*, 23743735221125439. [CrossRef]
157. Jaeken, J.; Billiouw, C.; Mertens, L.; Van Bostraeten, P.; Bekkering, G.; Vermandere, M.; Aertgeerts, B.; van Mileghem, L.; Delvaux, N. A systematic review of shared decision making training programs for general practitioners. *BMC Med. Educ.* **2024**, *24*, 592. [CrossRef]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.