

# An Exploratory Study of Patient- Provider Communication during the Medical Evaluation for Kidney Transplantation

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# Background

- Over 1 million Americans have chronic or end-stage kidney disease (CKD/ESKD) and require renal replacement therapy.<sup>1</sup>
- Although live donor kidney transplantation (LDKT) is the optimal treatment for CKD/ESRD, only 6,293 LDKTs were performed last year, compared to 15,471 DDKTs.<sup>2</sup>
- Minoritized groups are at increased risk for CKD/ESRD, but significantly less likely than Whites to receive LDKT.<sup>1</sup>
- Quality of patient-provider communication influences health outcomes.<sup>3-4</sup>
- There is a need for further research on communication occurring during kidney transplant evaluations.

**The purpose of this study was to explore patient-provider communication about LDKT and the use of key elements of instrumental, persuasive, relational and affective communication during transplant evaluations.**

## Methods

- **Sample:** 35 potential transplant candidates being evaluated for kidney transplant from two abdominal transplant programs in the northeastern US were included. All transplant nephrologists employed at both sites were included.
- **Audio-recording:** All participants consented to audio-recording of transplant evaluation consultations.
- **Patient Survey:** 26-item survey collected patients' ratings of the visit and their providers' communication. Surveys also collected demographics and attitudes towards LDKT.
- **Qualitative Data Analysis:** Transcripts of recorded consultations were segmented by utterance for analysis of instrumental, persuasive, relational and affective communication.

**TABLE 1: PATIENT DEMOGRAPHICS (N=35)**

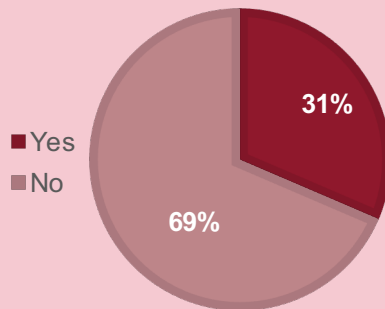
Age, mean	51.9
Sex	
Female	16 (45.7)
Male	19 (54.3)
Race	
Black	20 (57.1)
White	12 (34.3)
Hispanic/Latino	3 (8.6)



# Results

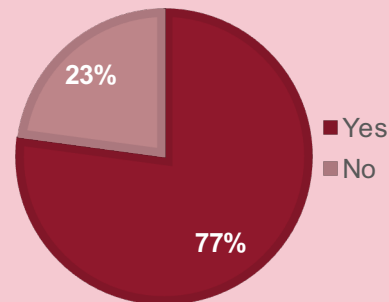
- Nearly half (48.6%) of the patients rated their providers' communication as “poor”, or “fair”.
- Only about 8% of utterances contained confirming speech, including statements of approval, apology, clarification, and shared laughter.
- However, disconfirming exchanges such as expressions of indifference, disapproval, and mocking laughter were also rare. About 7% of utterances contained disconfirming language.

**FIGURE 1: PERCENT OF PATIENTS WHO REQUESTED LIVING DONATION**



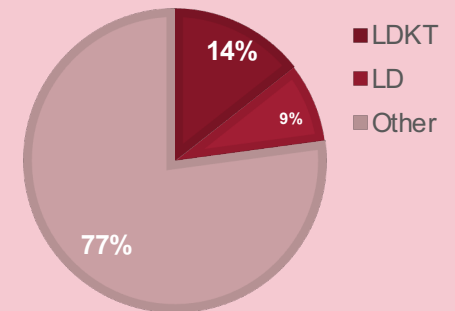
All participants reported a willingness to receive a LDKT. However, only 11 had made a request for living donation (LD).

**FIGURE 2: PERCENT OF PATIENTS LIKELY TO SEEK OUT LD BECAUSE OF PROVIDER'S COMMUNICATION**



27 participants reported they were likely to seek out a living donor because of their discussion with the nephrologist.

**FIGURE 3: UTTERANCE TYPE**



Out of 33,190 total utterances identified, only 4,779 were related to LDKT, and just 2,812 were related to living donors.



# Results

Most patient-provider communication pertained to the patient’s medical and psychosocial history, the symptoms and etiology of their CKD/ESRD , treatment plans and options, and the logistics of future care as a transplant candidate. However, only about 2% (n=902) of utterances concerned the speaker’s preferences and values for the patient’s past, current, and future care (see Table 2).

**TABLE 2: INSTRUMENTAL COMMUNICATION**

Topic	Definition & Representative Quote	Frequency (%)
<b>Psychosocial</b>	Discussion about the participant’s social and emotional state, including employment status, social support, adherence to treatment, and substance use. “And where do you work?”	6489 (11%)
<b>Medical History</b>	Conversation regarding the participant’s past and current medical issues unrelated to CKD, psychiatric history, and their family medical history. “Any history of sickle cell disease in your family?”	21467 (36%)
<b>Disease</b>	Exchanges about the participant’s kidney disease, including the disease’s development, progression, and cause. “When, when did you become aware that you have high blood pressure?”	8741 (15%)
<b>Treatment</b>	Discussion of CKD/ESRD treatment, including LDKT, DDKT, pancreas transplant, paired donation, hemodialysis, and peritoneal dialysis. “ But the main risk is with the antirejection medication that you have to take after transplant.”	5939 (10%)
<b>Care Logistics</b>	Details about the care the patient and/or their living donor should expect, including the remainder of the evaluation day, any required medical tests, and the pre and post operative schedule for transplant. “Your, your objective is to get through, to get through these tests very rapidly.”	2717 (5%)

Out of 11 persuasive tactics coded for, only three were used with any frequency (see Table 3).

**TABLE 3: PERSUASIVE COMMUNICATION**

Topic	Definition & Representative Quote	Frequency (%)
<b>Argument</b>	Factual statements based on statistics, personal experience, personal expertise, and/or hypothetical expertise, intended to direct the patient to take a desired action. “The cadaver kidneys they don't last as long as a kidney coming from a living person.”	872 (1%)
<b>Refutation</b>	Factual statements intended to dispel a previously expressed claim or argument. “Very, very, rarely there’s any surgical issues.”	864 (1%)
<b>Foot in the Door</b>	A small request for compliance, followed with a larger request. “All I request you to do is consider seriously about this living kidney donation and talk with the family members. And call us if you have any questions. Or if you just want to visit again, we’d be more than happy to talk, okay?”	864 (1%)



# Conclusions

- Although LDKT is the optimal treatment for kidney failure, discussion of LDKT comprises only a small fraction of the transplant evaluation.
- Providers' use of confirming communication and proven persuasive tactics were quite rare during the recorded evaluations. Providers generally focused on gathering information on the patient, instead of establishing rapport or attempting to encourage LDKT.
- Transplant providers may benefit from training to more effectively encourage patients to pursue LDKT and seek out living kidney donors.

## References

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