Published in final edited form as:

Clin Transplant. 2019 June ; 33(6): e13577. doi:10.1111/ctr.13577.

Perceptions of a Culturally Targeted Hispanic Kidney Transplant Program: A Mixed Methods Study

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Abstract

Disproportionately fewer waitlisted Hispanics receive living donor kidney transplants (LDKTs) compared to non-Hispanic whites. Northwestern Medicine's® culturally targeted Hispanic Kidney Transplant Program (HKTP) is associated with a significant increase in LDKTs among Hispanics. This multi-site study assessed potential kidney recipients' and donors' and/or family members' perceptions of HKTP's cultural components through semi-structured interviews and validated surveys. Qualitative thematic analysis and descriptive statistics were performed. Thirty-six individuals participated (62% participation rate) comprising 21 potential recipients and 15 potential donors/family (mean age: 51 years, 50% female, 72% preferred Spanish). Participants felt confident about the educational information because a transplant physician delivered the education, and viewed the group format as effective. Participants felt that education sessions

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addressed myths about transplantation shared by Hispanics. Primary use of Spanish enhanced participants' understanding of transplantation. While few knew about living donation before attending the HKTP, most were 'more in favor of' kidney transplantation (97%) and living donation (97%) afterwards. Few reported learning about the HKTP from outreach staff and suggested leveraging community leaders to promote HKTP awareness. Our findings suggest the HKTP's cultural components were viewed favorably, and positively influenced perceptions of kidney transplantation and living donation, which may help reduce transplant disparities in Hispanics. ([Clinicaltrials.gov](https://clinicaltrials.gov/ct2/show/study/NCT03276390) registration # [NCT03276390](https://clinicaltrials.gov/ct2/show/study/NCT03276390), date of registration: 9-7-17, retrospectively registered)

Keywords

ethnicity; health disparities; semi-structured interviews; living donation

INTRODUCTION

Hispanics in the United States have a disproportionately higher prevalence of end-stage renal disease (ESRD) than non-Hispanic whites.¹ Although living donor kidney transplantation (LDKT) is promoted as the best treatment for ESRD, only a third of transplants are LDKTs.^{2,3} Disparities in access to LDKT are magnified in ethnic minority groups.³ Disproportionately fewer waitlisted Hispanics received kidney transplants (18.3% versus 26.7%) and LDKTs (4.3% versus 11.1%) than non-Hispanic whites in 2017.⁴

The Department of Health and Human Services' "Action Plan to Reduce Racial and Ethnic Health Disparities" recommends providing culturally competent care to reduce racial/ethnic disparities.⁵ To date, several interventions have been shown to effectively increase LDKTs,^{6,7} but few have been culturally targeted to redress disparities in LDKT access.⁸⁻¹⁰ To reduce LDKT disparities among Hispanics, The Northwestern Medicine® (NM) Hispanic Kidney Transplant Program (HKTP) developed a culturally competent and linguistically congruent program. Since its inception in 2006, the HKTP has been associated with increased LDKT rates and reduced LDKT disparities among Hispanics patients.¹¹

Little is known about patients' perceptions of the HKTP and its culturally targeted components. A survey study of HKTP participants found that the culturally competent aspects of care were "a lot" or "completely" important to them.¹² As the HKTP is implemented in other transplant centers, qualitatively assessing patients' perceptions of the HKTP's culturally competent components is necessary to improve health care delivery, achieve better healthcare outcomes,¹³ improve patient satisfaction,¹⁴ and increase the rate of Hispanic LDKTs. Additionally, patient perceptions foster greater understanding of cultural competency.¹⁵ This mixed-methods multi-site study assessed potential kidney recipients' and potential living kidney donors' perceptions of the HKTP's culturally competent care at two transplant centers delivering the HKTP.

PATIENTS AND METHODS

Setting

While the HKTP has been routine clinical practice at NM in Chicago, IL, the HKTP was implemented at Baylor University Medical Center (BUMC) in Dallas, TX in December, 2016 through a NIDDK-funded study to evaluate the implementation of the HKTP on LDKT disparities in Hispanics. Although the HKTP has been described at length elsewhere, additional details are provided below.^{11,12}

The HKTP involves numerous culturally targeted components: community engagement; bilingual and bicultural staff; communication in Spanish; and transplant education for patients, their families, and potential donors that addresses Hispanic cultural values and beliefs.¹² Community engagement entails a bilingual, bicultural outreach staff (social worker or nurse) speaking directly to Hispanic dialysis patients in Spanish (or English) about the HKTP at dialysis centers. The outreach staff addresses concerns about transplantation and obtains patients' contact information to promptly schedule them for evaluation.

The outreach staff and scheduler remind patients to bring family members, especially elders. Elder attendance is important because, among many Hispanics, elders play a vital role in treatment decision making and can give their "blessing" for other family members to pursue living donation. Young family member attendance is also important to address their fears about living donation and open their consideration as potential donors.

The HKTP's core component is the initial kidney transplant evaluation day, which begins with two educational sessions for potential kidney recipients and their family/potential donors. Both sessions are delivered by a bicultural transplant surgeon in Spanish and address commonly shared Hispanic cultural concerns about transplantation and living donation.

Afterward, the physician meets with each patient and their family together to address further concerns. The physician directly asks the patient whether she/he has any potential living donors to foster conversation about living donation, identify barriers to accepting or considering living donation by the patient or family, and identify the number of potential living kidney donors. The physician then documents the patient's verbal expression of potential living donor interest in the medical record. Later, a clinician calls patients who had verbally reported having additional potential donors who have not been ruled out. The clinician reminds patients to have their other interested potential donors contact the transplant center. These steps serve to increase patients', family members', and transplant team's awareness and availability of potential donors.

HKTP staff contact patients who have not completed evaluation within 10–12 weeks. The HKTP physician contacts those patients' nephrologists to help patients complete evaluation. The notable difference between the HKTP at NM and BUMC is that BUMC did not have a Spanish-speaking outreach staff for six months of this study.

Sample and Recruitment

Potential kidney recipients and their family members/potential living donors were eligible for study participation if they had attended the HKTP's initial transplant evaluation day in the prior 3 months, were age 21 or older, and self-identified as Hispanic/Latino/a. The 3-month window following evaluation day participation minimized recall bias while allowing ample time for attending HKTP follow-ups and interaction beyond the initial evaluation day.

Consecutive recruitment was used and eligible participants were recruited in an incident cohort from NM (November 2017-September 2018) and BUMC (January 2018-September 2018). Eligible participants were mailed an invitation letter. At NM, study staff who were male 4th and 1st year medical students trained in qualitative methods (NA, NF) called potential participants 1–2 weeks after the initiation letter was sent; at BUMC, potential participants were made aware of the study and interested individuals had to call the staff (NA) to participate. At both sites, staff (NF, AS) also recruited eligible participants in transplant clinic waiting rooms on the day of participation in the program; those interested were called within two weeks to schedule an interview. Potential participants were called up to six times.

Data Collection

A mixed-methods ethnographic methodological approach was used to assess perceptions of the HKTP's culturally competent care at two transplant centers delivering the HKTP. Ethnography aims to understand human behaviors from the "insider's point of view," uncover culturally embedded norms shared among members of a group, and situate phenomena in their political, social, economic, and historical contexts.¹⁶ We employed the concurrent triangulation design, convergence model which involved conducting concurrent semi-structured interviews and administering validated surveys.¹⁷ Qualitative data provided in-depth insights into patients' perceptions of culturally competent care, which is particularly valuable given that little information is known about this topic,¹⁶ while quantitative data showed the magnitude of perceptions in relation to demographic and cultural measures.¹⁸ The convergence model afforded the opportunity to better understand perceptions of culturally competent care by comparing, corroborating, and validating quantitative results with qualitative data.^{17, pg 62–65}

Interviews were conducted by telephone in Spanish or English, as preferred by participants. Anderson et al.'s Analytic Framework to Evaluate the Effectiveness of Healthcare System Interventions to Increase Cultural Competence,¹⁹ the cultural competency literature,^{13,20,21} and a multidisciplinary team comprised of an anthropologist (EJG) and a Hispanic transplant surgeon (JCC) guided the development of the interview guide. Interviews included 32 open- and closed-ended (Likert scale) questions covering the following topics about the HKTP: overall perceptions, linguistic competency, community outreach, staff's sensitivity to patients' cultural needs, education sessions' effect on participants' understanding of kidney transplantation and living donation, and demographics (Appendix). Cognitive interviews were conducted with seven potential kidney recipients to pilot test and refine the interview guide.²² Interviews were administered by a qualitatively trained, bilingual research staff

(NA), lasted approximately 30 minutes, were audio-recorded, and supplemented by hand-written notes.

Interviews concluded with validated surveys to assess level of acculturation, ethnic experience, and preferences for shared decision-making. Acculturation was assessed because it is associated with patients' reports of health care experiences, particularly in Hispanics.²³ Perceptions of culturally competent care were expected to be informed by Hispanic preferences for a passive role in shared decision making,²⁴ and engagement in medical decisions may be associated with participant satisfaction.²⁵ Engagement in shared decision making during the clinical encounter was assessed to evaluate whether the encounter matches patient preferences indicated by the Control Preferences Scale. Participants were compensated \$20. Institutional Review Board approval was obtained from Northwestern University and BUMC, and participants provided verbal informed consent.

Survey Instruments

The Brief Acculturation Survey for Hispanics (BASH)²⁶ measures acculturation using self-reported language preference as a proxy for level of acculturation.²⁷ BASH is comprised of four items using a five-point Likert scale. Scores range from 4 to 20; higher scores indicate greater levels of acculturation ($\alpha = 0.90$).²⁸

The Scale of Ethnic Experience (SEE)²⁹ is a multidimensional measure of Hispanic identity and acculturation by assessing attitudes, beliefs, and cultural preferences related to the acculturation process. SEE includes 32-items using a five-point Likert scale across four subscales: ethnic identity, perceived discrimination, mainstream comfort, and social affiliation. Ethnic identity refers to the extent to which an individual identifies as a member of an ethnic group. Perceived discrimination refers to the extent to which an individual experienced discrimination due to being part of an ethnic group. Mainstream comfort refers to an individual's level of comfort with American culture. Social affiliation refers to an individual's preference for or comfort interacting with one's own ethnic group over other ethnic groups. Scores range from 1 to 5; higher scores indicate higher levels of each construct. All subscales exceed a Cronbach's alpha of 0.77 for Hispanic respondents.²⁹

The Control Preferences Scale (CPS)³⁰ measured participants' preferred role in decision making as passive, collaborative, or active using one 5-point Likert scale question. The score ranges from 1 to 5. A score of 1 or 2 indicates a more active role, a score of 3 indicates a collaborative role, and a score of 4 or 5 demonstrates a preference for a more passive role in the decision making process. The Spanish version had Cronbach's alpha of 0.72.³¹

The 9-item Shared Decision Making Questionnaire (SDM-Q-9)³² measured the perceived degree to which collaborative SDM was achieved in the one-on-one clinical encounter during a HKTP clinic visit. SDM-Q-9 uses a 6-point Likert scale ranging from "completely disagree" to "completely agree" to assess the SDM process. All items were first summed for a score between 0 and 45, then adjusted to a 100-point range; higher scores indicate a more collaborative role in the decision making process. The Spanish version had a Cronbach's alpha of 0.89.³¹

Qualitative Analysis

All interviews were transcribed and translated. Open-ended responses were analyzed using thematic analysis.³³ Codes were generated inductively using the constant comparative method.³⁴ Open coding was utilized to segment qualitative content, then codes were organized into overarching codes based on cultural competence concepts via axial coding.³⁵ Codes were applied to subsequent transcripts, were revised to adjust for new data, and then applied to all prior transcripts. This process was repeated until reaching saturation whereby no new themes emerged from the data.³⁶ Two authors (NA, NF) independently coded all transcripts, and a third author (EJG) helped resolve discrepancies to reach consensus.^{37–39} Once the codebook was finalized, and new transcripts were independently coded, inter-rater reliability (Kappa >0.80) was established.³⁷ Thereafter, all remaining transcripts were coded by two staff (NA and NF).

Quantitative Analysis

Descriptive statistics were used to generate frequencies of demographic characteristics, responses to cultural measures, and the BASH, SEE, CPS, and SDM-Q-9 scales. Likert scale measures of perceptions of care were dichotomized into agree ('strongly agree' and 'agree' responses) and do not agree ('neutral', 'disagree', and 'strongly disagree') categories. Bivariate analyses tested the relationship between dichotomized measures of perceptions of culturally competent care and participant demographics, BASH, SEE, CPS, and SDM-Q-9 scales, and study site. The relationships between perceptions of the HKTP and participant demographics, BASH, SEE, CPS, and SDM-Q-9 scales, and study site were evaluated. Statistical analyses were performed using SPSS version 25 (Chicago, IL); $p < 0.05$ was considered statistically significant.

RESULTS

Participants

Of 148 individuals who we attempted to reach via telephone call or email, 73 were contacted, and 36 were interviewed (NM $n=21$, BUMC $n=15$) (62% participation rate) (Figure 1). Of 36 participants, 21 were potential recipients, and 15 were family members and/or potential living donors. Participants had a mean age of 51 years, were evenly divided by gender, were mostly of Mexican heritage (86%), and preferred Spanish (72%) (Table 1). Family members and/or potential living donors were children ($n=5$), parents ($n=4$), spouses ($n=4$), or siblings ($n=2$) of the potential recipients. Participants' demographics did not significantly differ between study sites. However, compared to potential recipients, family members and/or potential living donors were statistically younger ($p < 0.02$), and more likely to be employed ($p < 0.001$), but they did not differ by income ($p < 0.16$).

Surveys

Participants' BASH, SEE, CPS, and SDM-Q-9 scores are presented in Table 2. Overall, participants maintained low levels of acculturation and high levels of Hispanic ethnic identity and social affiliation. Participants generally preferred a collaborative shared decision

making process. Survey scores did not differ significantly between study sites, and no significant associations emerged between survey scores and perceptions of the HKTP.

Interviews

Perceptions of the HKTP's Linguistic Competency—HKTP participants felt that providing care and disseminating information in Spanish was crucial to understand their condition and treatment options. Participants' Likert-scale assessments of the HKTP components are presented in Table 3. All agreed that the 'transplant team provided all the services in their language of choice' and no participant felt 'misunderstood by HKTP staff.' Many identified the use of Spanish as vital, stating, "there is no way that they [Hispanics] would [otherwise] capture 50% of that [information]," and felt "limited" and "scared" if Spanish had not been spoken. Using Spanish in most interactions made participants feel "comfortable," "interested," and "allowed for the whole family to understand." One re-transplant candidate stated, "all this is new even though I already had a transplant" because he had not received prior information in Spanish. Furthermore, several participants reported being better able to express their preferences using "their own language" and felt comfortable "telling [the HKTP staff] if they wanted to do the surgery or not." One participant described the program as "very important for us, to whom the program is directed, because... this country is still not comfortable with the [Spanish] language, [which is] tremendously debilitating." Several participants reported that written information in Spanish complimented the HKTP's spoken communication, and served as effective reference material to teach family members about transplantation.

Almost half of the participants reported using interpreters during their evaluation. Most did not feel that interpreters adversely affected their interaction with healthcare providers, stating that they "had no doubts" about the information they received, and that interpreters were "clear" and "fully capable." But few participants believed that translated content is not always accurate and surmised that interpreters may not know as much as the doctor, making it hard to accurately convey the information.

Several participants noted that speaking and providing information in Spanish was not sufficient to provide linguistically competent care. They emphasized that because Spanish is spoken differently depending on nationality, providers should either use the language common to all Latin American nationalities or be familiar with colloquialisms of all Latin American nations.

Perceptions of the HKTP's Education—Most participants agreed that the education session 'included all the information they wanted' (97%), and the presentation answered all their questions (94%). Participants found the information relevant to Hispanics because "everyday examples" were used to address culture-specific content (e.g., fertility after donation, duration of time a live donor kidney graft would last for the recipient, donor's health following donation). Participants found the education to be dedicated to "things that most Hispanics do not know", which was "very important because, as Hispanics, we have many myths that are harmful... and they showed us that it is nothing like what people say."

Participants appreciated the opportunity to ask the physician educator questions during and after educational sessions.” They described the physician as “open to answering the doubts [and] questions that are very difficult to understand”, and willing to “explain in a different way so they could understand.” Further, participants reported that they trusted the physician’s “first-hand information” because the physician “does the surgery,” “knows what they are talking about,” and “is not going to trick you.” After attending the HKTP, participants stated “there were many things that I heard from certain friends, but when he [the educator] said it... I understood it better.”

Participants considered the group format of educational sessions an effective way to deliver information. Asking questions in a group setting made participants feel more comfortable, “as if we were a family.” Participants commended group education for fostering “learning something extra” that is “useful to all of us” and enabling clarifications that “many Latinos are happy with.” The individual wrap-up session thereafter enabled information to “sink in a bit better for people” because for Hispanics, “it goes a long way when it’s... a personal session” and “we get into dialogue.”

Perceptions of the HKTP Physician and Staff—Participants perceived HKTP staff as “attentive,” “kind,” and “knowledgeable” and providing thorough, culturally competent care. All participants agreed that ‘the HKTP made them feel welcome’; one participant noted feeling “as if [she] were at home” with the staff.

All participants agreed that the physician and HKTP staff ‘reflected their cultural background.’ Participants agreed that the HKTP team (100%) and the physician (97%) were ‘sensitive to their cultural identity, values, and beliefs.’ All agreed that the physician ‘respected what they had to say,’ ‘spent enough time with them,’ and ‘cared about them and their health.’ Most participants agreed that they ‘trust their doctor with their medical care’ (97%) and ‘would recommend the doctor to their family and friends’ (97%).

Participants’ Motivation for Attending the HKTP—Many participants reported being unaware that the HKTP was culturally competent until making an appointment or attending the program: “I realized [it was] the Hispanic transplant program when we got to the talk. I was not aware of that program.” Respondents reported learning about the HKTP primarily through word-of-mouth from family members, friends, or other community members who had undergone HKTP evaluation. Participants recalled that their family members or friends had endorsed the HKTP’s quick availability of transplantation if a donor became available, the good health of transplant recipients they knew, and the “excellent service” received there.

Participants also learned about the HKTP through physician referral and recommendation, which was sufficient motivation to make an appointment without seeking further information about the HKTP. Others were motivated to attend the HKTP by knowing that it was “made for Hispanics,” and the hospital’s positive reputation. The Internet rarely used as an initial source of information about the HKTP but was used mostly by participants’ children. More BUMC than NM participants identified non-affiliated dialysis center social workers as their initial source of information of the program.

Impact of the HTKP on Perceptions of LDKT—Before attending the HTKP, most participants reported knowing nothing or very little about living donation, commenting how they were “completely ignorant,” “never thinking about it,” and “afraid to ask people.” Participants who had heard about living donation before attending the HTKP expressed “uncertainty and a lot of fear,” and acknowledged they “would have never considered it” and “had to think about it because it was not safe.” However, most participants agreed they were ‘more in favor of kidney transplantation’ (97%), and ‘more in favor of living donation’ (97%) after attending the HTKP. After the HTKP, participants felt that living donation was much safer than they had thought, noting how “life will continue normally after donating an organ.” They also reported having “a lot of confidence that things [about donation] are not as they [community members] say.”

Participants commonly recognized that the Hispanic community has a great need for kidneys: “I was very interested in participating... because now, more than ever, I realize and think that many of us can help those who have that need,” “I’d feel happy to give an organ,” and “knowing that you are healthy, that you can donate, you can give life to another person.” Many commented that the HTKP benefits the Hispanic community by removing common myths and doubts about transplantation and donation, motivating family/friends to donate, and disseminating accurate information about donation to the community. Therefore, participants recommended leveraging community resources to raise greater awareness about the HTKP.

DISCUSSION

This study examined Hispanic patients’, family members’, and potential donors’ perceptions of the HTKP and found that most participants perceived the HTKP components as culturally and linguistically competent. These favorable perceptions of the HTKP may contribute to its effectiveness in reducing disparities in LDKT.

Reducing LDKT disparities is particularly important because ethnic/racial minority groups comprise 64% of all kidney transplant candidates.⁴⁰ Hispanics comprise 18% of the nation’s total population, and are the largest and fastest growing ethnic minority group in the US.⁴¹ Given their unique needs for transplant information and transplant access, providing culturally targeted care to the Hispanic patient population can accommodate the goals of personalized medicine,⁴² while reducing health disparities. Therefore, transplant programs should strive to better address the needs of the patients most at risk. Insights gained into the components of culturally competent transplant care delivered through the HTKP that resonate with the patient and donor population may better enable transplant programs to implement such programs in the future.

A major finding was that the HTKP positively influenced Hispanics’ perceptions of kidney transplantation and living donation. HTKP education sessions were influential because they directly address Hispanics’ commonly shared misconceptions about transplantation and donation.¹² For example, the education clarifies that, after donating, live donors can have children (both men and women), do not become disabled, and can return to work. The education also emphasizes that the Catholic Church does support organ donation. By

addressing these and other misconceptions, the physician educator reinforced the importance of learning about transplantation from experts (i.e., transplant physicians), rather than relying on misinformation acquired from the community.

An important finding was that communication can be challenging even with Spanish-speaking providers given the variability of dialects or idioms within Latin American countries and across Latin American nationalities. Even when a transplant center's patient population is predominantly of a single heritage, as in this study (86% Mexican), healthcare providers' heritage may differ, potentially hindering communication. Notably, the physician educators at NM and Baylor were Colombian and Peruvian, respectively. Using vocabulary common to all Hispanic geographic regions within Spanish-speaking countries, and avoiding region-specific colloquialisms could improve provider-patient communication and understanding. Thus, an important consideration is the demographic profile of the Hispanic population that a transplant center is caring for when adopting the HKTP or linguistically competent model of care.

Transplant programs commonly lack linguistically competent education and care.^{43,44} While the HKTP at both sites upholds National Standards for Culturally and Linguistically Appropriate Services,^{45,46} the use of professional interpreters throughout the remainder of evaluation was still necessary. Participants' perceptions varied about how interpreters affect the HKTP's linguistic congruence. While some participants preferred hearing transplant information directly from bilingual providers, our findings suggest that interpreters may be utilized without compromising perceptions of the HKTP as linguistically competent if used only to supplement bilingual staff. However, effective interpreter use should be carefully assessed by the bicultural and bilingual staff as competent and reliable, as is done within the HKTP.

Prior research found that Hispanics are more likely to prefer a physician as an educator, in a traditional position of authority, rather than other members of the healthcare team.⁴⁷ Accordingly, the HKTP's educational sessions are deliberately provided by a transplant physician. Participants perceived the information provided as accurate when delivered by physician educators. Further, because the education was delivered by the transplant physician, participants devalued information they acquired from the community. Our findings suggest that addressing culture-specific beliefs about transplantation is optimized when delivered by those perceived as authority figures within the healthcare team. Future research should ascertain whether Hispanics' preferences for physician educator vary by physician gender.

Our study population's demographic profile may contextualize the low level of acculturation, high level of ethnic identity, and preference for shared decision making. Participants were less acculturated than other studied Hispanic populations, which may be due to the positive association between acculturation and formal education, English fluency, and time spent in the US.^{26,28} Participants were primarily over age 40, most had completed high school education or less, had little English fluency, and most were first generation immigrants. When compared to previous studies, our participants had higher scores of ethnic identity and social affiliation, which are correlated with less acculturation.^{26,28,29} Few

participants preferred active decision making than what has been shown in prior studies.^{48,49} This finding may be related to the association between less time spent in the US and the preference for a shared decision making model. Moreover, younger age and higher education level are also associated with an active role in decision making.^{48–50}

Participants' preferences for shared decision making support the need for transplant programs to actively involve family and friends in the transplant education and evaluation process. The HKTP intentionally encourages family member participation in group educational sessions to increase the number of potential living donors, and diminish the need for recipients to ask family members to donate.⁵¹ Participants' comments suggest that the group sessions were effective by giving families a shared informational foundation about transplantation and donation from which to start complex discussions. Consequently, most participants felt comfortable discussing living donation with their family during and after HKTP attendance. Many family members and/or potential living donors reported that the HKTP addressed their concerns about donation and helped them decide to donate. Family members and/or potential living donors' favorable outlook on donation may relieve potential recipients from asking family members to donate. Future research should assess the number of family members, specifically elders, accompanying potential recipients to the HKTP to determine whether the HKTP is effectively encouraging potential recipients (or "participants") to bring family members to the education sessions.

An unexpected finding was that many participants did not know the HKTP was targeted to Hispanics prior to attendance. Family members/friends and referring physicians may not have explicitly told patients the HKTP was for Hispanics or in Spanish, but their recommendation was likely based on positive experiences of attending the program, or recognizing the value in referring patients to the HKTP. Accordingly, many participants attended because someone else identified it as a program they would benefit from because of its language and cultural concordance. Thus, few participants recall having been referred to the HKTP by the program's outreach healthcare professional. Other studies corroborate that word-of-mouth, face-to-face communication, and the use of existing community resources, such as churches, senior centers, or community health organizations, are effective strategies for engaging the Hispanic population and disseminating information.^{52–54} Study participants similarly recommended drawing upon existing community resources to raise awareness about the HKTP. Furthermore, among Hispanics, having an interpersonal connection with the source endorsing an intervention is far more effective for engagement and recruitment than the prestige and respect associated with institutions.⁵⁵ Therefore, relying on the community to leverage existing community leaders to promote the HKTP, rather than an outreach staff solely affiliated with the transplant program, may increase the Hispanic community's buy-in of and attendance in the HKTP. This finding could dramatically shift the means by which culturally competent programs increase the access of services to disadvantaged populations.

The process of evaluating the HKTP has revealed several opportunities for its improvement, including: a) leveraging other culturally targeted avenues to reach more Hispanics e.g., spreading the word among Hispanics at Churches, health fairs, and community centers, b) improving marketing about the HKTP to explicitly explain that the program is targeted to

Hispanics, c) helping Hispanic patients complete the evaluation process in a timely manner, c) assuring that the entire staff is entirely bilingual to eliminate the need for interpreter services, d) involving more bilingual/bicultural staff in post-evaluation care, and e) expanding the HKTP program to offer more than two clinic dates per month for Hispanics to participate.

Study strengths include the mixed-methods approach to provide qualitative and quantitative insights into perceptions of culturally competent care. As a multi-site study, our findings support the generalizability of study findings. This study has limitations. Since most participants were of Mexican heritage and primarily Spanish-speaking, generalizability of the findings to other Hispanic subgroups and English-speaking Hispanics may be limited. Future research should assess whether Hispanics of other ethnic subgroups similarly regard the HKTP as culturally competent. Interviews were conducted within three months of participants completing their initial transplant evaluation and responses may have been affected by recall bias. However, the three-month period enabled patients to engage in additional interactions with the HKTP team, and thereby provide them greater insights into their experiences. While the sample size was ample for qualitative analysis, the small sample size and homogenous results limited our power to detect statistical associations between perceptions of the HKTP's cultural competency, demographics, and acculturation, ethnic experience, and decision making preferences.

Conclusion

Our study's findings suggest that Hispanics viewed the HKTP's components favorably and as culturally competent. The HKTP positively influenced Hispanics' perceptions of kidney transplantation and living donation. Future research should assess how the HKTP's culturally competent and linguistically congruent care may contribute to increased living kidney donation and reduced LDKT disparities in the Hispanic population.

Acknowledgments

Funding: This paper was supported by the NIDDK Diversity Supplement Award (Grant No. 3R01DK104876-02S1 to EJ Gordon) and NIDDK parent award (1R01DK104876 to EJ Gordon and JC Caicedo). The funder had no role in study design; collection, analysis, and interpretation of data; writing the report; and the decision to submit the report for publication. We thank Elida Romo and Naomi Anderson for their research assistance. Earlier drafts of this paper were presented at the American Transplant Congress in Seattle, WA on June 2, 2018, and at the American Society for Bioethics and Humanities in Anaheim, CA on October 19, 2018.

Appendix: Hispanic Kidney Transplant Program (HKTP) Participant Semi-Structured Interview Guide

Note: Italicized text should be read to the participant. Italicize text in brackets [] are instructions to the interviewer.

The Hispanic Kidney Transplant Program (HKTP) was created to meet the social, cultural, and linguistic needs of Hispanic patients, families, and living donors. Since you recently started transplant evaluation in the Program, we would love to hear about your experiences and opinions of the Program.

Section 1 General HKTP, Community Perceptions, and Suggestions for Improvement of the HKTP

1. Overall, what do you think about Northwestern's Hispanic Transplant Program?
 - a. What part(s) of the Hispanic Kidney Transplant Program did you like?
 - b. What part(s) of the Hispanic Kidney Transplant Program did you not like?
2. Have you attended any other transplant program other than Northwestern's Hispanic Kidney Transplant Program?
 - ☐ Yes → IF YES, how do the transplant programs compare?
 - ☐ No
3. Did the Hispanic Kidney Transplant Program make you feel welcome?
 - ☐ Yes → IF YES, how so?
 - ☐ No → IF NO, how so?
4. Were the magazines and brochures in the reception area available in your preferred language?
 - ☐ Yes
 - ☐ No
5. Did you get all the information you wanted from the Hispanic Kidney Transplant Program?
 - ☐ Yes
 - ☐ No → IF NO, what additional information would you have liked?
6. Were you given written information? (pamphlets, brochures, articles, etc.)
 - ☐ Yes → IF YES:
 - What do you think of the written information given to you?
 - Was the information easy to understand?
 - ☐ Yes
 - ☐ No → IF NO, how so?
 - ☐ No → IF NO: Would you have liked additional written information?
 - ☐ Yes → IF YES, what kind of information would you have liked?
 - ☐ No
7. Did the written information include all of the topics important to you?
 - ☐ Yes → IF YES, how so?
 - ☐ No → IF NO, what information should have been included?

8. What do you think other Hispanics would think about the Hispanic Kidney Transplant Program?

9. Would you recommend the Hispanic Kidney Transplant Program to other Hispanics?

___ Yes → IF YES:

- Why? What would you tell them about the program?

___ No → IF NO:

- Why? What would you tell them about the program?

___ Unsure → IF UNSURE, how so?

Section 2: The HKTP Visit: Educational Sessions and Physician Wrap-Up

Now, let's talk about the education sessions that you attended for your transplant evaluation at the HKTP. By education sessions, I am referring to the presentation(s) given to you by the doctor.

Educational Sessions (Kidney Transplant and Living Donor Process, Risks, Benefits)

1. What did you think of the presentation(s)?

2. Did the presentation(s) answer all of the questions you had?

___ Yes → IF YES, what questions did you have?

___ No → IF NO:

- How so?
- Which questions were not answered?

3. Did the presentations answer all of the questions that other Hispanics might have?

___ Yes → IF YES, what questions could they have?

___ No → IF NO: which questions were not answered?

4. Did Dr. Caicedo/Dr. Ruiz/Dr. Fernandez speak in a way that was easy to understand?

___ Yes

___ No → IF NO, how so?

Physician Wrap-Up Session [Potential Recipients only]

I now want to talk about the wrap-up session with the doctor that occurred in the exam room after the presentations.

1. Who did you speak with in the exam room?

☐ Transplant Surgeon

☐ Nephrologist

☐ Other: _____

2. What did you think of the conversation with the doctor?

3. Were any of your family members present with you during your visit to the Hispanic Kidney Transplant Program?

___ Yes → IF YES, who? – (relationship to the potential kidney recipient)

___ No → IF NO, [skip to question 6]

[If answered yes to question 3, proceed to question 4; if not, proceed to question 5]

- 4. Were any of your family members present in the exam room with you?**
☐ Yes → IF YES, who? – (relationship to the potential kidney recipient)
☐ No

[If answered yes to question 4, proceed to question 5; if not, proceed to question 6]

- 5. Were any of your family members involved in the conversation?**
☐ Yes → IF YES, how so?
☐ No

- 6. Did you discuss the availability of potential living donors in your family with the doctor?**
☐ Yes
☐ No

*[If answered yes to question 6, proceed to question 7; if not, proceed to the next section]
 For many people, this is the first time discussing the availability of living donors in their family. Even if it has been talked about before, it may still be the first time that it's being discussed in front of a doctor. When that is the case, it may be uncomfortable to talk about this topic with a doctor if family members are present.*

- 7. How did you feel when talking in front of your family about the availability of living donors? Why did you feel this way?**

*I'd like to ask you about your thoughts on the conversation you had with the doctor in the exam room. To do so, I will read a list of statements and I would like for you to indicate how much you agree or disagree with them. For each statement, please indicate if you "strongly agree," "agree," "neither agree or disagree," "disagree," or "strongly disagree".
 [For every response that is "neither agree or disagree," "disagree," or "strongly disagree", ask "how so?"*

a. The doctor explained things in a way that was easy to understand.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

b. The doctor reflects my cultural background.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

c. The doctor was sensitive to my cultural identity, values, and beliefs.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

d. The doctor listened carefully to me.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

e. The doctor respected what I had to say.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

f. The doctor spent enough time with me.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

g. The doctor cared about me and my health.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

h. I trust the doctor with my medical care.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

i. I would recommend the doctor to my family and friends.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly

Section 3: Interactions with the HKTP Staff

I would now like to ask you some questions about the rest of the Hispanic Kidney Transplant team. The team is made up of every individual that you interacted with ASIDE from the doctor that gave you the presentation and talked to you in the exam room. This includes the receptionist, the transplant nurses, the social worker, and any other doctor you interacted with during your visit.

1. In general, what do you think about the Hispanic Kidney Transplant Program team?**2. Did you ever feel misunderstood by the Hispanic Kidney Transplant Program Team?**

☐ Yes → IF YES, how so?
☐ No

3. Did you interact with any member of the transplant team with the help of a professional interpreter?

☐ Yes → IF YES:

- How was interaction with the interpreter?
- Was the interaction with the interpreter different from your interactions with the rest of the Spanish-speaking staff?
☐ Yes → IF YES, how so?
☐ No
- Was the interpreter readily available when you needed them?
☐ Yes
☐ No

☐ No → IF NO

- Would you have liked the help of a professional interpreter?
☐ Yes → IF YES: Were you made aware that interpreter services were available?
☐ No

I will again read a list of statements and I would like for you to indicate how much you agree or disagree with them. For each statement, please indicate if you "strongly agree", "agree", "neither agree or disagree", "disagree", or "strongly disagree".

[For every response that is "neither agree or disagree", "disagree", or "strongly disagree", ask "how so?"]

- a. The transplant team spoke to me in a way that was easy to understand?**
Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- b. The transplant team provided all services in my language of choice.**
Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- c. The transplant team reflects my cultural background.**
Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- d. The transplant team was sensitive to my cultural identity, values, and beliefs.**
Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- e. The transplant team addressed my needs.**
Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- f. The transplant team treated me with respect.**
Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

Section 4: Prior to Attending the HKTP (Outreach and Scheduling)

Let's now talk about the time before you started evaluation in the HKTP.

1. How did you first hear about the Hispanic Kidney Transplant Program?

- ☐ At the Dialysis Center – by the outreach staff member
- ☐ Family
- ☐ Friends
- ☐ Doctor; Please Specify: _____
- ☐ News Media; Please Specify: _____
- ☐ Other: _____

[If participant comments on talking to the outreach staff member, then ask:]

A. What was your experience like talking to the outreach staff (Martha)?

B. What did the outreach staff tell you about the HKTP?

C. How did talking to the outreach staff affect your willingness to come to Northwestern's/Baylor's Hispanic Kidney Transplant Program?

2. After hearing about the Hispanic Kidney Transplant Program for the first time, did you try to find out more information?

___ No

___ Yes → IF YES:

- **Where did you look for that information?** *[First, ask in an open-ended way, then ask specific options listed below.]*

- ☐ Family and Friends
- ☐ Doctor, Please Specify: _____
- ☐ Online Search:
- ☐ Northwestern's/Baylor's Transplant Program website
 - ☐ *Infórmate* website

- ☐ Other: Specify: _____
☐ Social Media; Please Specify: _____
☐ Other: _____

- Did you find the information you were looking for?
☐ Yes
☐ No

3. What did you hear about the Hispanic Kidney Transplant Program before attending?
4. Before attending the Hispanic Kidney Transplant Program, what did you think about the Program?
5. What ultimately motivated you to come to Northwestern/Baylor?
6. What was it like to schedule your clinic visit at the Hispanic Kidney Transplant Program?
 - a. What did you like about the scheduling process?
 - b. What did you not like about the scheduling process?

Section 5: Opinions Before and After Participating in the Hispanic Kidney Transplant Program

I am now going to ask you some questions about how your opinions before and after attending the Hispanic Kidney Transplant Program. First, I'd like for you to think back to your opinions about kidney transplantation and living donation BEFORE attending the Hispanic Kidney Transplant Program.

10. How did you feel about kidney transplantation before attending the Hispanic Kidney Transplant Program?
11. How did you feel about living donation before attending the Hispanic Kidney Transplant Program?

I will again read a list of statements and I would like for you to indicate how much you agree or disagree with them. For each statement, please indicate if you "strongly agree," "agree," "neither agree or disagree," "disagree," or "strongly disagree". [For every response that is "neither agree or disagree," "disagree," or "strongly disagree," ask "how so?"]

- a. **After attending the Hispanic Kidney Transplant Program, I am more in favor of kidney transplantation.**
 Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- b. **After attending the Hispanic Kidney Transplant Program, I am more in favor of living donation.**
 Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree
- c. **After hearing the presentations (educational sessions), I am more in favor of kidney transplantation.**
 Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

d. **After hearing the presentations (educational sessions), I am more in favor of living donation.**

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

e. **After talking to the doctor in the exam room, I am more in favor of kidney transplantation.**

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

f. **After talking to the doctor in the exam room, I am more in favor of living donation.**

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

The Hispanic Kidney Transplant Program is always looking for ways to improve and its participants often have ideas on how to improve it. I'd like to ask you one last question about the Program:

1. How can the Hispanic Kidney Transplant Program improve?

Section 6: Demographics

Please help us learn a little bit more about you by responding to these last few questions. This information will be kept confidential.

1. Are you: ☐ Male ☐ Female

2. How old are you? _____ years

3. What is the highest grade or level of formal education you have completed?

- ☐ Less than high school graduate
- ☐ High school graduate
- ☐ Some college
- ☐ College graduate
- ☐ Post graduate degree (MA, PhD, MD, DO, etc.)

4. What is your present marital status?

- ☐ Single/Never married
- ☐ Married/Domestic partner/Civil union
- ☐ Separated or divorced
- ☐ Widowed
- ☐ Living with partner

5. Please identify your heritage:

- 1 _____ Puerto Rican
- 2 _____ Mexican
- 3 _____ Cuban
- 4 _____ Dominican
- 5 _____ South American
- 6 _____ Central American
- 7 _____ other Latino: _____

8 ____ other Spanish origin: _____

6. What generation best applies to you?

- ☐ 1st generation (You were born in another country.)
☐ 2nd generation (You were born in USA, but either parent born in another country.)
☐ 3rd generation (You were born in USA, both parents born in USA, and all grandparents born in another country.)
☐ 4th generation (You were born in USA, both parents born in USA, and at least one grandparent born in another country, with remainder born in the USA.)
☐ 5th generation (You and your parents born in USA, and all grandparents born in the USA.)

7. In general, in what language do you prefer to talk to health providers about your medical care?

- ☐ English
☐ Spanish
☐ English and Spanish equally

8. How well do you speak English?

- ☐ Not at all
☐ Not well
☐ Well
☐ Very well

9. What is your current employment status?

- ☐ Employed full-time
☐ Employed part-time
☐ Not employed
☐ Homemaker
☐ Disabled
☐ Retired
☐ Student

10. What is your total household income for the past 12 months (you + spouse/partner)?

- ☐ Less than \$15,000
☐ Between \$15,000 and \$34,999
☐ Between \$35,000 and \$54,999
☐ Between \$55,000 and \$74,999
☐ Between \$75,000 and \$94,999
☐ More than \$95,000

11. What is your primary health insurance?

- ☐ Private health insurance (through employer or self-pay)
☐ Medicaid/Medicare
☐ None
☐ Other: _____

12. Are you a potential living kidney donor or potential kidney recipient?

- ___ Potential living kidney donor (continue to question 13)
 ___ Potential kidney recipient (end of interview)
 ___ Other/Neither: _____ (continue to question 13)

13. What is your relationship to the potential recipient? I am the recipient's...

- ☐ Spouse
☐ Parent
☐ Child
☐ Sibling
☐ Aunt/Uncle/Cousin/Niece/Nephew
☐ Friend
☐ Non-directed/Anonymous/Good Samaritan donor
☐ Other: _____

Section 7: Shared Decision Making**1. In terms of making decisions about your health care with your transplant team, which ONE of the following best describes how you would like to make treatment decisions? (Degner et al. 1997)**

- ___ I prefer to make the decision about which treatment I will receive.
 ___ I prefer to make the final decision about my treatment after seriously considering my doctor's opinion.
 ___ I prefer that my doctor and I share responsibility for deciding which treatment is best for me.
 ___ I prefer that my doctor makes the final decision about which treatment will be used, but seriously consider my opinions.
 ___ I prefer to leave all decisions regarding my treatment to my doctor.

(Probe: Could you tell me about your reasons for choosing that preference?)

Thank you for your time!

Abbreviations:

BASH	Brief Acculturation Survey for Hispanics
BUMC	Baylor University Medical Center
CPS	Control Preferences Scale
ESRD	End-Stage Renal Disease
HKTP	Hispanic Kidney Transplant Program
LDKT	Living Donor Kidney Transplant
NM	Northwestern Medicine
SDM-Q-9	9-item Shared Decision Making Questionnaire
SEE	Scale of Ethnic Experience

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Figure 1.
Eligibility Diagram

Table 1.

Participant Characteristics

Characteristics	Total [†]	Northwestern Medicine (n=21)	Baylor University Medical Center (n=15)	P [‡]
	n	n (%)	n (%)	
Age, mean [SD] (range)	51.4 [14] (23–84)	52.7 [14] (27–67)	49.5 [16] (23–84)	
< 41 years	9 (25)	5 (24)	4 (27)	0.19
41–60 years	19 (53)	9 (43)	10 (67)	
61 + years	8 (22)	7 (33)	1 (7)	
Gender				
Male	18 (50)	10 (48)	8 (53)	0.74
Female	18 (50)	11 (52)	7 (47)	
Education				
Less than High school	15 (42)	7 (33)	8 (53)	0.37
High School	7 (19)	6 (29)	1 (7)	
Some College	8 (22)	4 (19)	4 (27)	
College Graduate	6 (17)	4 (19)	2 (13)	
Post Graduate Degree	0 (0)	0 (0)	0 (0)	
Language Preference				
Spanish	26 (72)	15 (71)	11 (73)	0.76
English	4 (11)	3 (14)	1 (6)	
Spanish & English Equally	6 (17)	3 (14)	3 (21)	
Nationality				
Mexican	31 (86)	18 (86)	13 (87)	0.21
South American	2 (6)	2 (10)	0 (0)	
Central American	2 (6)	0 (0)	2 (13)	
Cuban	1 (3)	1 (5)	0 (0)	
Generation of Immigration				
1 st generation	33 (92)	20 (95)	13 (87)	0.71
2 nd generation or later	3 (9)	1 (5)	2 (13)	
English Fluency				
Not at all	6 (17)	4 (19)	2 (13)	0.74
Not well	14 (39)	7 (33)	7 (47)	
Well	5 (14)	4 (19)	1 (7)	
Very well	11 (31)	6 (29)	5 (33)	
Total Household Income				
< \$15,000	11 (31)	4 (19)	7 (47)	0.10
\$15,000 < \$34,999	11 (31)	8 (38)	3 (20)	
\$35,000 < \$54,999	7 (19)	6 (29)	1 (7)	
\$55,000 +	7 (19)	2 (10)	4 (27)	

Characteristics	Total [†]	Northwestern Medicine (n=21)	Baylor University Medical Center (n=15)	<i>p</i> [‡]
	n	n (%)	n (%)	
Did not respond	1 (3)	1 (5)	0 (0)	
Employment Status				
Employed full-time	12 (33)	7 (33)	5 (33)	0.23
Employed part-time	1 (3)	0 (0)	1 (7)	
Not employed	4 (8)	4 (19)	0 (0)	
Homemaker	5 (14)	3 (14)	2 (13)	
Disabled	12 (33)	5 (24)	7 (47)	
Retired	2 (6)	2 (10)	0 (0)	
Primary Health Insurance				
Private	10 (28)	5 (24)	5 (33)	0.65
Medicaid/Medicare	20 (56)	13 (62)	7 (47)	
None	6 (17)	3 (14)	3 (20)	
Participant Type				
Potential Recipient	21 (58)	12 (60)	9 (60)	0.86
Family Member and/or Potential Living Donor	15 (42)	9 (40)	6 (40)	

[†] Percents do not add up to 100 because some participants did not respond.

[‡] *p*-value pertains to the comparison between NM and BUMC by demographic characteristics.

Table 2.

Participants' Survey Scores

Survey	Potential score range	Total		Northwestern Medicine (n=21)		Baylor University Medical Center (n=15)		<i>P</i> [†]
		Mean	(SD)	Mean	(SD)	Mean	(SD)	
BASH [‡]	4–20	7.6	(3.9)	7.6	(4.3)	7.5	(3.4)	0.44
SEE (Ethnic Identity) [§]	1–5	4.1	(0.6)	4.1	(0.6)	4.1	(0.6)	0.68
SEE (Perceived Discrimination) [¶]	1–5	3.2	(0.7)	3.3	(0.7)	3.1	(0.7)	0.74
SEE (Mainstream Comfort) [‡]	1–5	3.0	(0.9)	2.9	(1.0)	3.2	(0.9)	0.47
SEE (Social Affiliation) [§]	1–5	3.5	(1.2)	3.7	(1.2)	3.2	(1.2)	0.77
SDM-Q-9 ^o	1–100	73.8	(18.0)	68.7	(15.5)	80.5	(19.9)	0.21
		Total n		n (%)		n (%)		<i>P</i>[‡]
CPS (active role) ^x	1–2	7		4 (19)		3 (20)		0.50
CPS (collaborative role) ^x	3	13		6 (29)		7 (47)		
CPS (passive role) ^x	4–5	16		11 (52)		5 (33)		

[†] *P*-value pertains to the comparison between NM and BUMC by survey responses.[‡] Higher scores correspond with greater acculturation, or comfort with American culture.[§] Higher scores correspond with greater identification with Hispanic identity or preference for interacting with Hispanics.[¶] Higher scores correspond with greater experiences of discrimination.^o Higher scores correspond with greater collaboration in decision making.^x Higher scores correspond with a more passive role in decision making.

Table 3:

Participants' Affirmative Responses to Statements Regarding the Hispanic Kidney Transplant Program (HKTP)

		Northwestern Medicine (n=21)	Baylor University Medical Center (n=15)	
	Total (%)	n (%)	n (%)	P §
General HKTP Perceptions[†]				
Did the HKTP make you feel welcome?	36 (100)	21 (100)	15 (100)	-
Were the magazines and brochures in the reception area available in your preferred language?	29 (81)	17 (94)	12 (92)	1.0
Did you get all of the information you wanted from the HKTP?	35 (97)	20 (95)	15 (100)	1.0
Were you given written information?	36 (100)	21 (100)	15 (100)	-
Was the written information easy to understand?	34 (94)	19 (91)	15 (100)	0.50
Did the written information include all of the topics important to you?	35 (97)	20 (95)	15 (100)	1.0
Would you recommend the Hispanic Kidney Transplant Program to other Hispanics?	35 (97)	20 (95)	15 (100)	1.0
Did you interact with any member of the transplant team with the help of a professional interpreter?	18 (50)	12 (57)	6 (40)	0.31
If interpreter was used, was the interaction with the interpreter different from your interactions with the rest of the Spanish-speaking staff?	3 (8)	2 (17)	1 (17)	1.0
If interpreter was used, was the interpreter readily available when you needed them?	16 (44)	10 (83)	6 (100)	0.53
If interpreter was not used, would you have liked the help of a professional interpreter?	0	0 (0)	0 (0)	-
Did you ever feel misunderstood by the Hispanic Kidney Transplant Program Team?	0	0 (0)	0 (0)	-
HKTP Educational Sessions[†]				
Did the presentation(s) answer all of the questions you had?	34 (94)	19 (91)	15 (100)	0.5
Did the presentations answer all of the questions that other Hispanics might have?	35 (97)	17 (85)	15 (100)	0.24
Did the presenter speak in a way that was easy to understand?	35 (97)	20 (95)	15 (100)	1.0
Physician Wrap-Up[‡]				
The doctor explained things in a way that was easy to understand.	36 (100)	21 (100)	15 (100)	-
The doctor reflects my cultural background.	36 (100)	21 (100)	15 (100)	-
The doctor was sensitive to my cultural identity, values, and beliefs.	35 (97)	21 (100)	14 (93)	0.42
The doctor listened carefully to me.	36 (100)	21 (100)	15 (100)	-
The doctor respected what I had to say.	36 (100)	21 (100)	15 (100)	-
The doctor spent enough time with me.	36 (100)	21 (100)	15 (100)	-
The doctor cared about me and my health.	36 (100)	21 (100)	15 (100)	-
I trust the doctor with my medical care.	35 (97)	20 (95)	15 (100)	1.0
I would recommend the doctor to my family and friends.	35 (97)	20 (95)	15 (100)	1.0

		Northwestern Medicine (n=21)	Baylor University Medical Center (n=15)	
	Total (%)	n (%)	n (%)	P §
General HKTP Perceptions[†]				
HKTP Staff[‡]				
The transplant team spoke to me in a way that was easy to understand.	36 (100)	21 (100)	15 (100)	N/A
The transplant team provided all services in my language of choice.	36 (100)	21 (100)	15 (100)	N/A
The transplant team reflects my cultural background.	36 (100)	21 (100)	15 (100)	N/A
The transplant team was sensitive to my cultural identity, values, and beliefs.	36 (100)	21 (100)	15 (100)	N/A
The transplant team addressed my needs.	36 (100)	21 (100)	15 (100)	N/A
The transplant team treated me with respect.	36 (100)	21 (100)	15 (100)	N/A
Perceptions following HKTP Participation[‡]				
After attending the Hispanic Kidney Transplant Program, I am more in favor of kidney transplantation.	35 (97)	20 (95)	15 (100)	1.0
After attending the Hispanic Kidney Transplant Program, I am more in favor of living donation.	35 (97)	20 (95)	15 (100)	1.0

[†]Data are presented as “n, % of total” who responded “yes”.

[‡]Data are presents as “n, % of total” that responded either “strongly agree” or “agree” to the statement listed.

[§]P-value pertains to the comparison between NM and Baylor by demographic characteristics. P value statistic was not calculated for questions without variance between groups.