

## Brief Report

## Prenatal Decision-Making in Patients with Limited English Proficiency: What Factors are Involved?

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Received Oct. 16, 2023; Accepted for publication Feb. 29, 2024; Published online March 15, 2024  
<https://doi.org/10.17161/kjm.vol17.21375>

### ABSTRACT

**Introduction.** A comprehensive definition of culture encompasses shared norms, beliefs, expectations, language, and customs, all of which are crucial considerations when working with patients with limited English proficiency (LEP). In this study, the authors examined how language, external influences, and patient-provider relational factors associated with decisional conflict in prenatal care patients.

**Methods.** The authors conducted a cross-sectional study to assess decisional conflict related to postpartum contraception, elective induction, and newborn feeding methods. The survey included questions about demographics, communication methods, external influences, and provider trust, and was distributed to prenatal care patients who spoke either English or Spanish. Data analysis involved using descriptive statistics and chi-square analyses.

**Results.** Out of the 23 respondents, 12 were Spanish-speaking and 11 were English-speaking. Spanish-speaking participants were less likely to have health insurance compared to English-speaking participants ( $\chi^2(1, N = 23) = 3.67, p = 0.016$ ). There was no statistically significant difference in decisional conflict between English- and Spanish-speaking participants. Religion affected 11 of 23 participants' decisions, while partner expectations influenced 10 of 23 participants. Working with an interpreter and the quality of interpretation were crucial for Spanish-speaking individuals. Most participants (59%) felt that the provider's understanding of the patient's cultural background was important for decision-making.

**Conclusions.** While there was no association between language discordance and decisional conflict, several factors influencing prenatal decision-making were identified. The use and quality of interpretation significantly affected decision-making and should be prioritized for patients with LEP. Religion and partner expectations were found to be highly influential in decision-making. Respondents also emphasized the importance of the provider's understanding of the patient's cultural background. *Kans J Med* 2024;17:11-15

### INTRODUCTION

Shared decision making (SDM) involves multiple parties reaching a consensus about a preferred treatment and is a growing clinical

practice.<sup>1</sup> While there is no definitive model for this approach to patient-centered care, there are guiding principles. SDM prioritizes patient autonomy and beneficence by providing patients with adequate information about their options to aid in their informed decision-making.<sup>2</sup> This approach has improved patient satisfaction, clinical outcomes, adherence to treatment, and lowered incidences of decisional conflict and regret.<sup>3-5</sup> Decisional conflict refers to an individual's uncertainty about the course of action when choices involve risk, loss, regret, or challenge personal life values.<sup>6</sup> As patients assume greater responsibility for their health decisions, evaluating the efficacy of SDM and its correlation with experiencing decisional conflict becomes increasingly important.

Decisional conflict is essential to evaluate not only for assessing the effectiveness of SDM and communication, but also for understanding the factors that contribute to a patient's role in decision-making. Previous studies indicate a higher incidence of poor-quality patient-clinician communication and SDM among non-White individuals, patients with limited English proficiency, families of lower socioeconomic status, and patients with lower education levels.<sup>7,8</sup> Providers and patients speaking different languages are associated with worse communication, which could impact SDM. Therefore, it is crucial to investigate how language discordance and culture might impact the degree of uncertainty regarding medical decisions in patients with limited English proficiency.<sup>9</sup>

Prenatal care is an area of medicine where SDM is particularly important, as pregnant women are required to make numerous decisions for both them and their child.<sup>10</sup> These decisions include choosing a birth control method, determining the mode of delivery, and selecting feeding options for the newborn. These decisions often involve SDM, as there are usually multiple options without a clear right or wrong choice.

Many prenatal decisions also are subject to cultural, familial, and societal influences.<sup>10,11</sup> Coast et al.<sup>10</sup> created a systematic mapping of interventions that have been implemented to address cultural factors that affect women's use of skilled maternity care, stating that,

*"Childbirth, and the time around birth, is a social and cultural event that is often governed by [societal] norms. However, in most societies, the dominant culture, expressed through social institutions such as the healthcare system, regulates how health issues are both perceived and addressed."*

Understanding the impact of linguistic, cultural, familial, and social experiences is crucial for physicians to comprehend the drivers behind patient decision-making, especially in non-white individuals.<sup>12</sup> Providers need to consider these cultural and societal influences as integral components of the SDM process, particularly in the context of decisional conflict. This study aimed to identify factors associated with decisional conflict in prenatal care, including language proficiency, cultural influences, and patient-provider trust.

### METHODS

This cross-sectional study included patients from two safety net clinics in Kansas City: The University of Kansas Medical Center's (KUMC) Maternal Options that Matter (MOM) Clinic and Jaydoc Free Clinic's Women's Health Initiative Program (WHIP). We distributed surveys to consenting patients receiving care at these clinics. Inclusion criteria were being 18 years or older, English- or Spanish-

speaking, receiving prenatal care at either clinic, and having made or being in the process of making decisions regarding postpartum birth control, elective induction versus spontaneous labor, and breastfeeding versus formula feeding. We excluded patients under 18 years old and those unable to complete a survey in English or Spanish. We distributed the surveys across various weeks of gestational age during pregnancy, but the timing of survey completion and specific weeks of gestational age were not recorded by the research team.

The survey comprised 35 items, incorporating Likert scale and binary response options. It gathered demographic data on race, ethnicity, birth country, education level, primary language, and health insurance status. To assess decisional conflict, the validated SURE (Sure of myself, Understand information, Risk-benefit ratio, Encouragement) questionnaire was included.<sup>13,14</sup> This 4-item checklist screens for clinically significant decisional conflict, with a cutoff score of  $\leq 3$  out of 4 indicating such conflict.<sup>13,14</sup> In addition to the SURE questionnaire, the survey included researcher-developed questions on external influences (seven questions) and the impact of language interpretation quality and method (three questions) on decision making. Furthermore, it featured researcher-developed inquiries on patient trust in providers, focusing on gender and racial background, cultural understanding, and perceived patient interest (four questions).

This study received approval from the KUMC Institutional Review Board. Surveys were distributed using Quick Response (QR) codes on paper within the clinic space, directing participants to individual surveys on their personal devices. Informed consent was obtained before initiating the survey, and no incentives were offered for participation. Survey completion was estimated to take 10 minutes. Data collection and management were conducted using REDCap<sup>®</sup> electronic data capture tools hosted at the University of Kansas Medical Center.<sup>15,16</sup> We used descriptive statistics and chi-square to analyze the data.

**RESULTS**

A total of 23 patients completed the surveys: 11 responded in English and 12 in Spanish. The response rate is unknown as documentation of those who did not complete the survey was not recorded, given the convenience sampling method during clinic visits. Summary of patient demographic data is presented in Table 1.

When comparing groups through chi-square analysis, a significantly higher proportion of English-speaking respondents anticipated having health insurance after birth compared to their Spanish-speaking counterparts ( $\chi^2(1, N = 23) = 3.67, p = 0.0161$ ). English-speaking respondents were predominantly from the U.S. or Mexico, while Spanish-speakers originated from various countries in Latin America.

As shown in Table 2, there was no significant difference in decisional conflict rates between English- and Spanish-speaking participants regarding postpartum contraception, elective induction, and method of newborn feeding ( $\chi^2(1, N = 23) = 4.296, p = 0.637$ ). The highest level of decisional conflict was observed regarding elective induction, while the lowest level was related to feeding method. However, there were no significant differences between English- and Spanish-speaking patients ( $\chi^2(1, N = 23) = 3.701, p = 0.296$ ).

**Table 1. Study population demographics.**

Demographics	English Respondents (n =11)	Spanish Respondents (n =12)
Age at time of survey (mean $\pm$ SD)	23.4 $\pm$ 3.6	26.9 $\pm$ 5.6
Ethnicity (%)		
Non-Hispanic/Latinx	3 (27.3%)	0 (0%)
Hispanic/Latinx	8 (72.7%)	12 (100%)
Race (%)		
White	5 (45.5%)	4 (33.3%)
Black	1 (9.1%)	0 (0%)
Other	3 (27.3%)	6 (50%)
Unspecified	2 (18.2%)	2 (16.7%)
Country of Origin (%)		
United States	5 (45.5%)	0 (0%)
Mexico	5 (45.5%)	4 (33.3%)
El Salvador	0 (0%)	1 (8.3%)
Honduras	0 (0%)	3 (25%)
Guatemala	0 (0%)	3 (25%)
Colombia	0 (0%)	1 (8.3%)
Ethiopia	1 (9.1%)	0 (0%)
Primary language (%)		
English	8 (72.7%)	0 (0%)
Spanish	2 (18.1%)	12 (100%)
Other	1 (9.1%)	0 (0%)
Highest education level (%)		
Some high school	3 (27.3%)	4 (33.3%)
High school degree or equivalent	5 (45.5%)	7 (50%)
Some college	2 (18.2%)	0 (0%)
Bachelor's degree	0 (0%)	1 (8.3%)
Graduate/professional degree	1 (9.1%)	0 (0%)
Insurance status at time of birth (%)		
Insured	6 (54.5%)	1 (8.3%)
Uninsured	5 (45.5%)	11 (91.7%)

**Table 2. Patient-reported decisional conflict regarding perinatal care coordination using the SURE questionnaire. A cutoff score  $\leq 3$  out of 4 is used to identify decisional conflict.**

Reported Conflict	English Respondents (n =11)	Spanish Respondents (n =12)
Induction of labor		
Conflict	5 (45.5%)	5 (41.7%)
No Conflict	6 (54.5%)	7 (58.3%)
Postpartum contraception		
Conflict	5 (45.5%)	3 (25%)
No Conflict	6 (54.5%)	9 (75%)
Feeding methods		
Conflict	2 (18.2%)	2 (16.7%)
No Conflict	9 (81.8%)	10 (83.3%)

The most frequently cited cultural factors influencing decision-making were religious affiliation and partner expectations in both groups. Respondents most often indicated that these factors had at least “some” influence compared to others. Family and community expectations, as well as family traditions, did not significantly impact participants’ decisions. Gender expectations were rarely influential, although patients may not discern the similarities between partner expectations and gender expectations.

External factors played a similar role in decision-making for both English- and Spanish-speaking participants. There was no statistically significant difference between the two groups regarding the influence of partner expectations ( $\chi^2(1, N = 23) = 1.051, p = 0.305$ ) or the influence of family traditions ( $\chi^2(1, N = 23) = 1.155, p = 0.283$ ).

Most participants indicated that the gender and racial background of the provider did not significantly affect their decision-making. For those for whom these factors were important, the rates were similar for both English- and Spanish-speaking participants. Thirteen respondents noted that the health care provider’s understanding of their cultural background significantly impacted their decision-making, either ‘very much so’ or ‘somewhat’. The factor most frequently chosen as having the greatest impact on decision-making (‘very much so’) was the provider demonstrating concern for the patient’s best interest (n = 15). Among those who felt their health care provider did not have their best interest in mind, 75% (n = 3) were Spanish-speaking. Figure 1a illustrates responses to cultural influence prompts, while Figure 1b illustrates responses to health care provider factors.

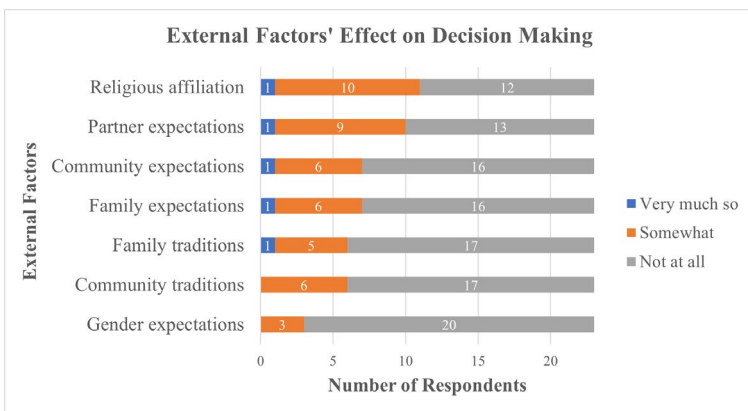


Figure 1a. Participant responses to Likert scale prompts regarding external factors that may have influenced prenatal decision-making. Participants were asked to rank the importance of the following aspects on their decision-making.

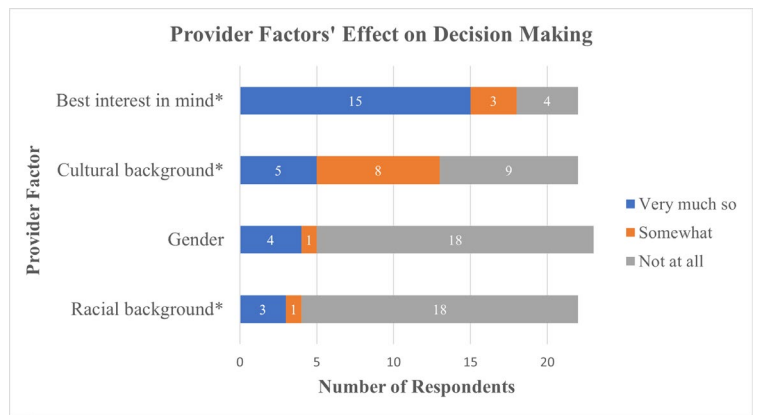


Figure 1b. Participant responses to Likert scale prompts regarding patient-provider relational factors that may have influenced prenatal decision-making. Participants were asked to rank the importance of the following aspects on their decision-making.

\*Some patients chose not to answer all questions resulting in variable total values.

Seven out of the 12 Spanish-speaking participants worked with a professional in-person interpreter, two used a virtual interpreter, and three conversed directly with their provider in Spanish. Among those who worked with an in-person interpreter, the majority felt that it significantly enhanced their clinical experience (n = 5). Figure 2 depicts respondents’ views on language interpretation. Both participants who used virtual interpreters during their prenatal visits emphasized the importance of the interpreter’s presence and the quality of interpretation.

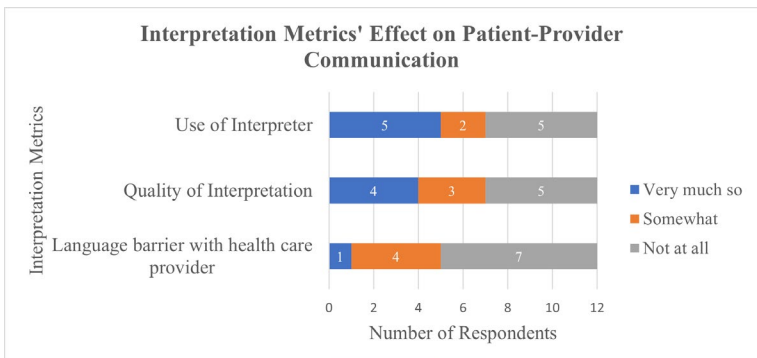


Figure 2. Responses to Likert scale questions from Spanish-speaking participants who utilized interpreting services.

## DISCUSSION

When addressing the needs of LEP patients, it is crucial to embrace a comprehensive definition of culture, which includes shared norms, beliefs, expectations, language, and customs, as well as external influences.<sup>17,18</sup> In this study, we aimed to explore how external influences, provider attributes, and the method and quality of language interpretation contribute to decision-making in prenatal care.

Our findings revealed no significant difference in decisional conflict between English- and Spanish-speaking individuals regarding postpartum contraception, elective induction, or newborn feeding methods. This suggests that language discordance alone may not be the primary factor contributing to decisional conflict. Therefore, simply providing proper interpreting services may not fully address the reported issues of poor patient-clinician communication among non-English speakers.<sup>7</sup>

Beyond language, we identified other factors, such as partner expectations and religious affiliation, that may influence prenatal decision-making and contribute to feelings of decisional conflict. However,

participants who utilized interpreters indicated that interpretation was crucial to their clinical experience, emphasizing the importance of interpretation quality.

A systematic review by Flores et al.<sup>19</sup> highlighted that the quality of care diminishes when patients with limited English proficiency lack access to interpreters or are provided with inadequately trained interpreters. This suggests that patients without proper language interpretation may face challenges, such as poor interpersonal interactions, increased likelihood of misunderstanding, decisional conflict, and compromised care. As health care professionals facilitate discussions regarding care coordination and informed decision-making, ensuring proper interpreting services could help alleviate feelings of decisional conflict and potentially reduce adverse outcomes across patient populations, as poor interpretation cannot be overlooked as a contributing factor.

We found that religious affiliation and partner expectations were the most influential cultural factors affecting decision-making. It is not surprising that various religious beliefs can influence health decisions, especially regarding contraception.<sup>20</sup> Partners often play a significant role in the prenatal and postnatal journey, so their expectations can heavily influence the decisions made by expectant mothers. In the traditional SDM model, the health care provider and the patient are the main participants. However, the influence of partners may disrupt this model, potentially leading to decisional conflict if the partner's and patient's beliefs and expectations are not aligned. Moreover, SDM processes may inadvertently involve individuals outside of the patient-clinician relationship. Clinicians should be mindful of these external influences and consider them when guiding patients through their decision-making processes.

We also found that participants were influenced by their health care provider's understanding of their culture, with 13 respondents indicating that it impacted their decision-making. Coast et al.<sup>10</sup> published a comprehensive review mapping interventions that providers can use to address cultural factors affecting maternal care in diverse contexts. They emphasized the importance of an interdisciplinary approach and active dialogue with communities to understand their cultural systems, health beliefs, practices, and preferences. These strategies are crucial in healthcare delivery to diverse populations to enhance understanding and reduce cultural ignorance. Fisher et al.<sup>18</sup> refers to this practice as "cultural leverage," which describes the strategy of improving the health of communities of color by utilizing their cultural practices, products, philosophies, or environments to facilitate behavior change in both patients and practitioners. By employing "cultural leverage" with patients, providers can demonstrate acknowledgment and understanding of a patient's culture, potentially mitigating a patient's decisional conflict.

While culture typically includes aspects of religion, language, beliefs, and norms that shape an individual's or group's perspectives, it can be challenging to separate cultural factors influencing decision-making from concurrent economic and geographic constraints.<sup>18</sup> This was evident in our study, particularly with Spanish-speaking respondents who were significantly less likely to have health insurance compared to their English-speaking counterparts. We recognize that these differences are not solely due to language spoken, but are influenced by

broader contextual factors affecting certain populations, which must be fully considered to provide appropriate care.

Additionally, most participants in our study believed that their health care providers had their best interests in mind. However, three of the four participants who disagreed were Spanish-speaking. While this study cannot pinpoint the exact source of this sentiment among these patients, it may indicate an area for improvement in how providers treat LEP patients and the need to ensure all components of culturally competent medical care are provided.

This study is limited by its cross-sectional design, conducted at varying weeks gestation during the patients' prenatal course, which was not documented. As a result, there may be variability in responses, as patients likely received differing levels of counseling throughout their pregnancy. Further studies are warranted in this context, with larger sample sizes and prospective study designs. Additionally, studies should explore the influence of other non-English languages and cultural contexts from patients' countries of origin. Future research on the practice of cultural leverage and its impact on decision outcomes for diverse communities in medicine would be a valuable addition to the existing literature on this topic.

## CONCLUSIONS

While language discordance did not significantly relate with decisional conflict, we identified several factors that associated with prenatal decision-making. The presence and quality of interpretation were found to be beneficial to communication and decision-making, highlighting the importance of prioritizing these services for patients with LEP. Religious beliefs and partner expectations were the cultural aspects most frequently reported by patients as influencing their decision-making, albeit to varying degrees. Interestingly, the factor most cited was the belief that their health care provider had their best interests in mind. This underscores the need for providers to consider the broader cultural contexts and external influences that contribute to a patient's decision-making process, while also emphasizing the importance of building trust with patients.

## REFERENCES

- Charles C, Gafni A, Whelan T. Shared decision-making in the medical encounter: What does it mean? (Or it takes at least two to tango). *Soc Sci Med* 1997; 44(5):681-692. PMID: 9032835.
- Elwyn G, Frosch D, Thomson R, et al. Shared decision making: A model for clinical practice. *J Gen Intern Med* 2012; 27(10):1361-1367. PMID: 22618581.
- Chi JJ. Reflections on shared decision making. *Otolaryngol Head Neck Surg* 2018; 159(5):809-810. PMID: 30060726.
- Joosten EA, DeFuentes-Merillas L, de Weert GH, Sensky T, van der Staak CP, de Jong CA. Systematic review of the effects of shared decision-making on patient satisfaction, treatment adherence and health status. *Psychother Psychosom* 2008; 77(4):219-226. PMID: 18418028.
- Krist AH, Tong ST, Aycock RA, Longo DR. Engaging patients in decision-making and behavior change to promote prevention. *Stud Health Technol Inform* 2017; 240:284-302. PMID: 28972524.
- Carpenito L. *Nursing diagnosis: Application to clinical practice*. 15th Edition. Lippincott Williams & Wilkins, 2016. ISBN: 978-1-49-633841-9.
- Pérez-Stable EJ, El-Toukhy S. Communicating with diverse patients: How patient and clinician factors affect disparities. *Patient Educ Couns* 2018; 101(12):2186-2194. PMID: 30146407.

- <sup>8</sup> LeBlanc A, Kenny DA, O'Connor AM, Légaré F. Decisional conflict in patients and their physicians: A dyadic approach to shared decision making. *Med Decis Making* 2009; 29(1):61-68. PMID: 19196706.
- <sup>9</sup> Paredes AZ, Idrees JJ, Beal EW, et al. Influence of English proficiency on patient-provider communication and shared decision-making. *Surgery* 2018; 163(6):1220-1225. PMID: 29482884.
- <sup>10</sup> Coast E, Jones E, Portela A, Lattof SR. Maternity care services and culture: A systematic global mapping of interventions. *PLoS One* 2014; 9(9):e108130. PMID: 25268940.
- <sup>11</sup> Megregian M, Emeis C, Nieuwenhuijze M. The impact of shared decision-making in perinatal care: A scoping review. *J Midwifery Womens Health* 2020; 65(6):777-788. PMID: 32767740.
- <sup>12</sup> Harris VC, Links AR, Walsh J, et al. A systematic review of race/ethnicity and parental treatment decision-making. *Clin Pediatr (Phila)* 2018; 57(12):1453-1464. PMID: 30014706.
- <sup>13</sup> Ferron Parayre A, Labrecque M, Rousseau M, Turcotte S, Légaré F. Validation of SURE, a four-item clinical checklist for detecting decisional conflict in patients. *Med Decis Making* 2014; 34(1):54-62. PMID: 23776141.
- <sup>14</sup> Légaré F, Kearing S, Clay K, et al. Are you SURE?: Assessing patient decisional conflict with a 4-item screening test. *Can Fam Physician* 2010; 56(8):e308-e314. PMID: 20705870.
- <sup>15</sup> Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—A metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform* 2009; 42(2):377-381. PMID: 18929686.
- <sup>16</sup> PA Harris, R Taylor, BL Minor, et al. The REDCap consortium: Building an international community of software partners. *J Biomed Inform* 2019; 95:103208. PMID: 31078660.
- <sup>17</sup> Marks J. *The Realities of Races*. Social Science Research Council. June 7, 2006. <http://raceandgenomics.ssrc.org/Marks/>. Accessed October 27, 2023.
- <sup>18</sup> Fisher TL, Burnet DL, Huang ES, Chin MH, Cagney KA. Cultural leverage: Interventions using culture to narrow racial disparities in health care. *Med Care Res Rev* 2007; 64(5 Suppl):243S-282S. PMID: 17881628.
- <sup>19</sup> Flores G. The impact of medical interpreter services on the quality of health care: A systematic review. *Med Care Res Rev* 2005; 62(3):255-299. PMID: 15894705.
- <sup>20</sup> Srikanthan A, Reid RL. Religious and cultural influences on contraception. *J Obstet Gynaecol Can* 2008; 30(2):129-137. PMID: 18254994.

*Keywords: prenatal care, decision making, cultural competence*