

Key Factors in Obstetric Delivery Decision-Making among Asian and Pacific Islander Women by English Proficiency

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Abstract

Childbirth is the most common reason women are hospitalized in the United States. Understanding (1) how expectant mothers gather information to decide where to give birth, and (2) who helps make that decision, provides critical health communication and decision-making insights. Diverse Asian American and Pacific Islander (AA/PI) perspectives on such topics are understudied, particularly among those with limited English proficiency (LEP). LEP is defined as having a limited ability to read, write, speak, or understand English. To address this research gap, we interviewed 400 women (18+ years) with a recent live birth on O'ahu, Hawai'i. Participants completed a 1-hour, in-person interview in English (n=291), Tagalog (n=42), Chinese (n=36), or Marshallese (n=31). Women were asked (1) what information was most important in deciding where to deliver and why; and (2) who participated in the decision-making and why. Responses were compared by LEP (n=71; 18%) vs English-proficient (n=329; 82%) in qualitative and quantitative analyses. Both LEP and English-proficient participants reported their obstetrician as the most important source of health information. Significantly more LEP participants valued advice from family or acquaintances as important sources of information compared to English-proficient participants. The top three health decision-makers for both those with LEP and English-proficient participants were themselves, their obstetrician, and their spouse, which did not differ significantly by language proficiency. These findings provide insights into health information sources and decision-making across diverse AA/PI populations, including those with LEP, and can help direct health interventions such as disseminating patient education and healthcare quality information.

Keywords

limited English proficiency, Asian American/Pacific Islander, decision-making, obstetric

Introduction

Childbirth is the most common reason why women are hospitalized in the United States (U.S.).¹ Hospital labor and delivery units account for 98.8% of births.² Childbirth is one of the most expensive areas in health care and a critical target for quality improvement.³ Understanding how expectant mothers gather information to decide where to give birth and who is involved in that decision provides insights into health communication and health decision-making patterns in a critical health care area. Diverse perspectives on these topics are needed as women from different backgrounds, cultures, and locations may have distinct pathways to health information and preferences for health decision-making.

Asian Americans and Pacific Islanders (AA/PI), which include many heterogeneous cultures, are two of the fastest growing population groups in the United States.⁴⁻⁵ Approximately 34% of the combined U.S. AA/PI population had limited English proficiency (LEP) in 2012 vs 9% of the total U.S. population.⁶

LEP is defined by the Department of Health and Human Services as "individuals who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English."⁷ LEP is associated with poorer health outcomes across diverse racial/ethnic groups.^{6,8}

Despite their large and growing numbers, AA/PI perspectives on health communication and health care decision-making are significantly understudied, particularly among those with LEP. Better insight into how to make health information understandable and culturally relevant is critical to an accessible, high-quality health system that engages diverse individuals in health decisions. This is particularly important as some evidence suggests that AA/PI receive poorer quality health care in some health domains.^{9,10} LEP is specifically associated with poorer quality health outcomes in childbirth, including obstetric trauma, which can lead to anal incontinence and potential lifelong discomfort.¹¹⁻¹⁵

Evidence on non-AA/PI LEP populations suggests that those with LEP may acquire health information differently from those who are English proficient (EP).^{16,17} For example, Spanish-speaking Hispanic mothers noted fewer educational sources about breastfeeding compared to English-speaking Hispanic mothers.¹⁶ Those with LEP might make decisions in the U.S. health care environment differently than those with EP and have different factors of value in those decisions.¹⁸ For instance, in the hospital setting, patients with LEP report feeling particularly powerless and have a strong preference for family involvement.¹⁸

The goal of this research was to understand who and what factors AA/PI populations by LEP valued when making decisions around obstetric delivery. Hawai'i is an excellent location to conduct this work. Over 57% of Hawai'i's total population is Asian American⁵ and over 25% is Native Hawaiian or Pacific Islander.¹⁹ Furthermore, approximately 25% of households in Hawai'i speak a language other than English at home of which approximately 55% speak English "very well."²⁰ A recent analysis of deliveries in major hospitals in Hawai'i found that approximately 10% of women giving birth had a language preference other than English recorded in the hospital's administrative data.²¹

Methods

Sample

Four hundred women (18+ years) who delivered a baby in the previous two years were interviewed on O'ahu, Hawai'i between

July 2013 and January 2015. First-time mothers as well as those with more than one baby were eligible for participation. Exclusion criteria were severe vision impairment and lack of ability to provide informed consent.

Recruitment

Recruitment occurred across various locations to ensure a diverse representation across AA/PI linguistic and racial/ethnic groups. Following methods used in previous studies of new mothers in Hawai'i,²⁶ community-based recruitment activities included Baby Expos and Craigslist, bus advertisements, farmers' markets, and local festivals. The targeted racial/ethnic/linguistic combination recruitment was 50 participants to ensure that no racial/ethnic group dominated recruitment allowing us to achieve a diverse sample with relevance to Hawai'i. Approximately 12% of women screened were not eligible. Of screened women, 6% ultimately did not participate. Participants received a \$30 gift card to a local drug store as an incentive.

Interviews

Interviews were conducted in-person for about 1-hour in English, Tagalog, Chinese, and Marshallese between July 2013 and January 2015. The study focused on three non-English languages determined to have both local and national relevance. (To include all relevant languages was not practically feasible.) Two Chinese dialects (Mandarin and Cantonese) were included, as Chinese is the third most common non-English language spoken in the U.S. after Spanish and 9.5% of Hawai'i's Chinese population is LEP.^{20, 22} Filipinos are a large and growing Asian American population with over 1.5 million Tagalog speakers in the U.S.²²⁻²³ and Tagalog speakers comprise 17.7% of the Filipino population in Hawai'i.²⁰ We included Marshallese, a language from the Republic of the Marshall Islands, because the growing population of these individuals in the U.S. has significant health disparities and a unique immigration status.²⁴ They are also extremely understudied and of high policy relevance in Hawai'i.²⁴ Bilingual research assistants (one for each language) translated all interview materials including informed consent, following standard, back-translation methods to ensure reliable instruments.²⁵ Tablet computers were used to record all interviews for qualitative analyses and interviews were administered through the tablet computers using the *iSurvey* tool (Wellington, NZ).

Variables

RACE/ETHNICITY

Racial/ethnic groups were Chinese, Filipino, Japanese, Native Hawaiian, White, Marshallese, Other Asian (ie, Thai, Korean), Other Pacific Islander (ie, Chuukese, Samoan), and "Other" race/ethnicity (ie, Hispanic, black). Racial/ethnic information was self-reported using established methods for the multiethnic and multiracial population of Hawai'i.²⁷

LEP

Participants who interviewed in a language other than English

were asked to report their degree of spoken English proficiency across four levels. Following standard procedures, any rating of less than the highest level (corresponding to "very well") was considered to have *Limited English Proficiency (LEP)*.²⁸ Not all participants who interviewed in another language self-reported LEP.

PARITY

Women were asked if the baby was their first baby or their first baby in Hawai'i. Those who responded "no" were considered to already have experience giving birth in Hawai'i.

SOURCES OF HEALTH INFORMATION

Sources of health information were compiled by several questions. First, participants were asked the importance of sixteen sources of health information they used in choosing the hospital where they delivered. These sources were based on previous literature and pilot interviews. They included: discussion with obstetrician; hospital tour; discussion with birth attendant; advice from family; my experience; discussion with other providers; advice from friends; social media; hospital internet research; hospital print materials; blog internet research; other internet research; advice from acquaintances; chat; hospital advertisements; and print media. Responses that mattered "a lot" were compared to those that mattered "somewhat," "a little," "not at all," or "not applicable." Participants were also asked if there were any other sources that were not mentioned. Following this, participants were asked the following open ended questions: "What was your most important source of health information?" and "Why was this your most important source of health information?"

PARTICIPANTS IN THE DECISION-MAKING PROCESS

Participants in the decision-making process were compiled by several questions. First, participants were asked the importance of nine individuals in their decision for the hospital where they delivered. These individuals were also based on previous literature and pilot interviews included: self, obstetrician, spouse, birth attendant, other health care provider, parents, friends, family, and acquaintances. Responses that mattered "a lot" were compared to those that mattered "somewhat," "a little," "not at all", or "not applicable." Participants were also asked if there were any others not listed who participated in the decision about where to deliver. Following this list, participants were asked the following open-ended questions: "Who was the most important person who helped you decide where to have your baby?" and "Why was this person the most important to you?"

QUALITATIVE ANALYSES

Relevant responses from the open-ended questions about quality information sources and decision-making participants were transcribed. Themes regarding who were the most important decision-making participants, and why, were identified using the framework approach²⁹ by two independent raters. The framework approach is a commonly-used, qualitative method

that allows coders to enter with strong expectations of themes based on previous literature and research experience, while also leaving flexibility for emerging themes. We use open-ended responses as illustrative quotes in the text to provide insights into the richness of responses generally. Quotes are not intended to represent the perspective of an entire group or to signify specific consensus across participants.

QUANTITATIVE ANALYSES

Demographics, sources, the decision context, and participants were first compared descriptively (ie, Chi-Square tests for categorical variables) by English proficiency status. For outcomes that varied significantly by LEP in bivariate analyses, we ran multivariable logistic models and controlled for race/ethnicity (compared to Whites), educational attainment (less than high school, high school, vs college degree or higher) and continuous age. All quantitative analyses were performed in STATA 12.0 (College Station, TX). Significance was set as $P < .05$. We also ran sensitivity analyses including a variable for parity in all models. The study was approved by the Institutional Review Board (IRB) of the University of Hawai'i.

Results

Study Demographics

Demographic characteristics of the study sample are displayed in Table 1. Interviews were conducted in the following languages: English ($n=291$), Tagalog ($n=42$), Chinese ($n=36$), and Marshallese ($n=31$). Overall, 17.8% ($n=71$) of women had LEP; those with LEP were Chinese (45.1%), Filipino (23.9%) and Marshallese (31.0%). All other races/ethnicities were English-proficient. A significantly greater proportion of LEP participants self-reported lower levels of education ($P < .01$) and low health literacy than those who were EP (35.2% vs 21.3%; $P = .01$), although linguistic groups did not differ significantly by age group ($P = .65$). Over 80% of women were either first-time mothers or recently had their first baby in Hawai'i. Fewer of those with LEP were delivering for the first time in Hawai'i (66.2% vs 86.6%; $P < .01$).

Sources of Information

OVERALL

The sources of information that "mattered a lot" to mothers were: discussion with obstetrician (OB) (72.4%); advice from family (49.6%); hospital tour (47.4%); personal experience (44.8%); and advice of friends (38.7%). Sources under 15% were hospital advertisements (13.9%), print media (10.9%), and social media (7.7%) (Table 2).

LEP vs EP

Among both linguistic groups, the obstetrician was considered the most salient source of information for the decision about where to give birth by nearly the same proportion of LEP and EP participants. Qualitative results from LEP and EP revealed it was a common theme of experience and expertise. A woman with LEP said it was "because he has been a doctor for so long."

This was echoed by an EP woman who stated that her obstetrician was the most important source of information "because she has been delivering babies for years and she herself has twins."

There were also some important differences across linguistic groups. LEP participants were significantly more likely than EP participants to endorse advice from family (69.0% vs 45.4%; $P < .01$), acquaintances (38.0% vs 14.9%; $P < .01$), or through chat/casual conversations (34.8% vs 14.3%; $P < .01$). Considering why receiving advice from family was important, one woman with LEP said, "I was too shy to ask questions, but I needed help." Similarly, the importance of receiving information by those who were close to her can be seen from a quote by a woman with LEP who said she valued information from friends because they "have experience and can talk to me in Chinese."

Significantly more mothers with English proficiency highly valued information from the hospital tour (51.2% vs 29.0%; $P < .01$) compared to those with LEP, and they were also significantly more likely to say "other" sources of information mattered a lot (17.6% vs 5.9%; $P = .02$) compared to those with LEP. The value of the hospital tour can be seen in this quote from an EP woman: "It encompassed what to expect when you are going to deliver the baby at this hospital and it showcased the hospital setting and patient accommodations."

MULTIVARIABLE MODELS

LEP retained statistical significance in logistic models where family (adjusted odds ratio (aOR):2.07; 95% CI: 1.02-4.18), acquaintances (aOR:2.61; 95% CI: 1.23-5.54); and "other" information sources (aOR:0.24; 95% CI: 0.07-0.87) were outcomes, adjusting for race/ethnicity, education, and age (Table 3). Chinese, Filipinos, Native Hawaiians, Marshallese, and other Pacific Islanders were significantly more likely than Whites to include family as a very important information source. Chinese, Native Hawaiians, and other Pacific Islanders were significantly more likely to include acquaintances.

Individuals Influencing the Decision-Making Process

OVERALL

The individuals who "mattered a lot" in participants' decision-making process were: the self (92.2%), OB (70.9%), and the spouse (67.8%). Individuals with the lowest endorsement were: others (4.3%) and acquaintances (10.8%) (Table 2).

LEP vs NON-LEP

Among both linguistic groups, participants considered themselves to be the most salient person in making decisions. A desire to make her own decision was a common theme among respondents as was their own trust in their knowledge, experiences, and preferences. As a woman with LEP said, she was the most important person in the decision-making process "because I have already experienced giving birth in this hospital." The OB was the next most influential person across the study sample, with a significantly higher number of those with LEP endorsing the OB as a participant compared to those with EP (81.4%

vs 68.7%; $P = .03$). Experience and expertise of the OB was noted by one of the participants. A woman with LEP stated, her obstetrician was the most important because “OB is specialized in pregnancy and delivering babies.” The importance of spouses was also high but did not vary significantly across groups. Joint decision-making between the spouse and the participant was important and a valued concern for several participants across both groups. As an EP participant said, her spouse was very important “because it was a decision we made together. And we wanted a birthing experience where it was between him and I and not necessarily between me and the OBGYN. It was something we wanted together.” A woman with LEP said her spouse was the most important because “I trust him the most and he must also be part of the decision-making; we need to both agree.”

MULTIVARIABLE MODELS

LEP retained statistical significance only in the logistic model where birth attendant was the outcome (aOR: 3.18; 95% CI: 1.36-7.39), controlling for race/ethnicity, education, and age (Table 4). Important differences were seen by race/ethnicity. For example, Filipino, Japanese, Marshallese, and other Pacific Islanders were significantly more likely than Whites to include their OBs in their decision. Filipino, Marshallese, and other Pacific Islanders were significantly more likely than Whites to include their parents and other family members. Those who were older were significantly less likely to include their parents in the decision.

SENSITIVITY ANALYSES

In the sensitivity analyses, the addition of the parity variable did not significantly impact any major study findings and the data are thus not shown.

Table 1. Demographic Data of Mothers by Language of Interview (N=400)				
	English Proficient	Limited English Proficiency	P-value	Total
n	n (%)	n (%)		n (%)
Total	329	71		400
Race/Ethnicity				
Chinese	23 (7.0)	32 (45.1)	<.01	55 (13.8)
Filipino	73 (21.3)	17 (23.9)		90 (21.8)
Japanese	56 (16.4)	0		56 (13.5)
Other Asian	12 (2.7)	0		12 (2.3)
Native Hawaiian	52 (15.8)	0		52 (13.0)
Marshallese	31 (9.4)	22 (31.0)		53 (13.3)
Other Pacific Islander/Chuukese	18 (5.2)	0		18 (4.8)
White	54 (16.4)	0		54 (13.5)
Don't Know/Other/Hispanic	10 (5.8)	0		10 (4.8)
Education				
Less than High School	20 (6.1)	21 (29.6)	<.01	41 (10.3)
High School	147 (44.7)	28 (39.4)		175 (43.8)
College Degree or More	162 (49.2)	22 (31.0)		184 (46.0)
Self-reported low health literacy^a	70 (21.3)	25 (35.2)	.01	95 (23.8)
Mother's Age Group				
18-24	87 (26.4)	16 (22.5)	.65	103 (25.8)
25-34	184 (55.9)	44 (62.0)		228 (57.0)
35+	58 (17.6)	11 (15.5)		69 (17.3)
First Baby/First Baby in Hawai'i	285 (86.6)	47 (66.2)	<.01	332 (83.0)
Born in U.S.	225 (68.4)	2 (2.8)	<.01	227 (56.8)
Born in Hawai'i	156 (47.4)	1 (1.4)	<.01	157 (39.3)

^aOne response was missing for this variable among the English proficient so n=328 for that group for this variable.

Table 2. Percent of Mothers Endorsing that These Source of Information and Potential Decision-Makers “Mattered a Lot” to Their Decision Where to Deliver, by English-Proficiency.

	English Proficient n (%)	Limited English Proficiency n (%)	P-value	Total n (%)	Valid responses
Source of Information					
Discuss Obstetrician	239 (72.9)	50 (70.4)	.68	289 (72.4)	399
Advice Family*	149 (45.4)	49 (69.0)	<.01	198 (49.6)	399
Tour*	168 (51.2)	20 (29.0)	<.01	188 (47.4)	397
My Experience	151 (46.0)	27 (39.1)	.29	178 (44.8)	397
Advice Friends	121 (37.0)	33 (46.5)	.14	154 (38.7)	398
Hospital Internet Research	102 (31.0)	15 (21.7)	.12	117 (29.5)	397
Hospital Print Materials	80 (24.5)	20 (29.0)	.43	100 (25.3)	396
Discuss with Other Providers	84 (25.7)	16 (22.5)	.58	100 (25.1)	398
Discuss Birth Attendant	73 (22.3)	16 (22.5)	.97	89 (22.4)	398
Advice Acquaintances*	49 (14.9)	27 (38.0)	<.01	76 (19.1)	399
Blog Internet Research	62 (18.9)	13 (18.8)	.99	75 (18.9)	397
Chat*	47 (14.3)	24 (34.8)	<.01	71 (17.9)	397
Other Info Source	54 (17.6)	4 (5.9)	.02	58 (15.5)	375
Other Internet Research	48 (14.7)	12 (17.4)	.57	60 (15.2)	396
Hospital Advertisements	41 (12.5)	14 (20.3)	.09	55 (13.9)	397
Print Media	36 (11.0)	7 (10.1)	.83	43 (10.9)	395
Social Media	25 (7.7)	5 (7.3)	.92	30 (7.7)	397
Decision-Makers					
Self	305 (92.7)	63 (90.0)	0.44	368 (92.2)	399
Obstetrician*	226 (68.7)	57 (81.4)	0.03	283 (70.9)	399
Spouse	221 (67.2)	49 (71.0)	0.54	270 (67.8)	398
Parents*	88 (26.8)	35 (50.0)	<0.01	123 (30.8)	399
Friends	74 (22.5)	24 (33.8)	0.04	98 (24.5)	398
Family*	67 (20.4)	27 (38.6)	<0.01	94 (23.6)	399
Birth Attendant*	63 (19.3)	25 (36.8)	<0.01	88 (22.3)	395
Other Health Care Provider	64 (19.6)	16 (23.5)	0.47	80 (20.3)	394
Acquaintances	30 (9.1)	13 (18.6)	0.43	43 (10.8)	399
Others*	12 (3.9)	4 (6.1)	0.02	16 (4.3)	375

*indicates statistical significance, $P < .05$.

Table 3. Multivariable Logistic Models for Information Sources that “Mattered a Lot” in Deciding Where to Deliver for Outcomes Significant in Descriptive Comparisons.

	Tour OR (95% CI)	Family OR (95% CI)	Acquaintances OR (95% CI)	Chat OR (95% CI)	Other Sources OR (95% CI)
LEP	0.53 (0.26-1.09)	2.07 (1.02-4.18)*	2.61 (1.23-5.54)*	2.24 (0.98-5.12)	0.24 (0.07-0.87)
Race/ethnicity					
Chinese	0.64 (0.26-1.56)	3.02 (1.16-7.83)*	3.88 (1.09-13.85)*	5.05 (1.65-15.48)*	1.28 (0.43-3.84)
Filipino	1.12 (0.54-2.32)	4.35 (1.98-9.58)*	2.73 (0.86-8.72)	0.99 (0.33-2.99)	0.71 (0.29-1.71)
Japanese	0.55 (0.25-1.21)	1.71 (0.72-4.09)	0.70 (0.15-3.32)	0.58 (0.15-2.19)	0.57 (0.22-1.48)
Other Asian	1.91 (0.45-8.10)	1.26 (0.29-5.48)	Omitted ^a	0.66 (0.07-6.13)	0.25 (0.03-2.14)
Native Hawaiian	0.56 (0.25-1.27)	4.91 (2.07-11.66)*	4.06 (1.21- 13.59)*	2.62 (0.87-7.91)	0.57 (0.20-1.63)
Marshallese	1.31 (0.51-3.39)	3.60 (1.35-9.60)*	1.29 (0.31-5.31)	1.49 (0.37-6.00)	Omitted ^a
Other Pacific Islander	2.57 (0.80-8.24)	6.37 (1.82-22.26)*	5.79 (1.34-25.12)*	3.73 (0.84-16.44)	0.31 (0.03-2.75)
White	ref	ref	ref	ref	ref
Other	1.93 (0.47-7.99)	1.75 (0.41-7.45)	1.35 (0.13-13.88)	1.26 (0.13-12.25)	0.50 (0.05-4.53)
Education					
<High School	0.17 (0.06-0.48)*	1.44 (0.53-3.90)	1.58 (0.51-4.92)	0.31 (0.07-1.30)	0.60 (0.06-5.61)
High School	0.42 (0.25-0.72)*	1.40 (0.82-2.38)	1.13 (0.57-2.24)	0.59 (0.28-1.21)	0.50 (0.24-1.05)
College Degree+	ref	ref	ref	ref	ref
Age	1.03 (0.99-1.07)	0.96 (0.92- 1.00)	1.01 (0.96-1.06)	1.01 (0.96-1.07)	1.03 (0.96- 1.09)

^aEveryone in this group picked one response (either all 0s or all 1s) so they were dropped from the model.

*indicates statistical significance, *P*<.05.

Table 4. Multivariable Logistic Models for Who “Mattered a Lot” in Decision-Making for Outcomes Significant in Descriptive Comparisons.

	Obstetrician OR (95% CI)	Birth Attendant OR (95% CI)	Parents OR (95% CI)	Family OR (95% CI)	Other OR (95% CI)
LEP	1.91 (0.85-4.30)	3.18 (1.36-7.39)*	1.83 (0.86-3.93)	1.47 (0.69-3.15)	5.93 (0.86-40.79)
Race/ethnicity					
Chinese	1.72 (0.70-4.24)	0.17 (0.04-0.70)*	1.82 (0.54- 6.06)	2.01 (0.44-9.11)	0.075 (0.01-0.83)*
Filipino	3.32 (1.58-6.99)*	1.26 (0.51-3.11)*	4.04 (1.52-10.73)*	6.54 (1.85-23.15)*	0.15 (0.03-0.92)*
Japanese	3.61 (1.58-8.21)*	0.69 (0.24-2.03)	0.71 (0.19-2.71)	1.02 (0.20-5.33)	0.30 (0.05-1.69)
Other Asian	1.10 (0.31-3.88)	0.47 (0.05-4.10)	Omitted ^a	Omitted ^a	1.04 (0.11-10.13)
Native Hawaiian	2.13 (0.96-4.76)	0.53 (0.16-1.73)	2.78 (0.96-8.04)	4.39 (1.14-16.87)	0.34 (0.06-1.92)
Marshallese	4.08 (1.44-11.60) *	5.82 (2.00- 16.97)*	13.05 (4.11-41.45)*	11.94 (3.02-47.28)*	0.08 (0.004- 1.34)
Other Pacific Islander	8.07 (1.63-39.98) *	3.30 (0.94-11.60)	6.91 (1.87-25.53)*	5.90 (1.23-28.32)*	Omitted ^a
White	--	--	--	--	--
Other	1.47 (0.36-5.97)	2.07 (0.43-9.96)	2.78 (0.54- 14.22)	5.95 (0.97- 36.51)	Omitted ^a
Education					
<High School	0.93 (0.30-2.84)	0.84 (0.27-2.62)	1.77 (0.62-5.06)	3.40 (1.18-9.75)	Omitted ^a
High School	1.17 (0.66-2.07)	1.17 (0.59-2.34)	1.12 (0.59- 2.09)	1.55 (0.78-3.09)	2.45 (0.68-8.80)
College Degree+	--	--	--	--	--
Age	1.00 (0.95-1.05)	1.02 (0.96-1.07)	0.94 (0.89-0.99)*	1.00 (0.95-1.05)	1.12 (1.01-1.24)*

^aEveryone in this group picked one response (either all 0s or all 1s) so they were dropped from the model.

*indicates statistical significance, *P*<.05.

Discussion

To fill an important literature gap with particular relevance for Hawai'i, this study determined what information sources were valuable to women when choosing a hospital to give birth and who helped with making such decisions. Given the lack of research on LEP women from diverse AA/PI racial/ethnic groups, these findings give insight into the sources of information women in these groups value, as well as who they trust and rely on to help make health care decisions around obstetric delivery.

Similarities were seen in some decision factors, including the fact that many LEP and EP participants endorsed their obstetrician as the most important source of health care information and as a critical health decision-maker. Follow-up research could determine how LEP and EP participants find their obstetrician. However, there were other important areas of variation by LEP. For example, LEP participants appeared to place more value on information they received through word of mouth from family members, friends and acquaintances while EP participants placed more value on information they received from hospital tours. These findings suggest that resources such as a hospital tour may not be available across diverse languages.

In other important findings, advice from acquaintances was also more common among those with LEP compared to those who were EP (38.0% vs 14.9%), as was information from casual conversations (chat) with acquaintances (34.8% vs 14.3%) (Table 2). Those with LEP may trust information from a personal relationship more, especially if written materials may not be available in their language or not easily understood/culturally relevant. Additionally, many Pacific Islander cultures have strong oral histories, which may also help explain this finding.³⁰

Many LEP and EP participants valued themselves, their obstetrician and their spouse/partner as important decision-making participants. Much like sources of information, LEP respondents valued individuals such as parents, friends, other family members (eg, sister, cousins, and in-laws) and acquaintances. LEP participants also highly valued their OB in the decision making.

Our findings suggest that those with LEP rely heavily on their social networks of families and communities. As immigrants may have smaller social networks in Hawai'i than those who were born or raised here, these tight knit social networks may provide critical social support, but have less access to a wide variety of diverse health information or perspectives.

The focus of our study was LEP vs EP, which is significantly understudied. However important differences were also found by race/ethnicity. In particular, we highlight the critical importance of the family and the social network to health information flow in many Asian and Pacific Islander populations.

Limitations

This study has many strengths, including rich data from hard to sample, understudied populations around a topic of vital national and local relevance but also has several limitations. It was conducted only in Hawai'i, and for practicality and relevance, specifically focused on only three of 60+ AA/PI languages. Therefore, it is not fully representative of all people with LEP in AA/PI racial/ethnic groups and may not be relevant to AA/PI in other locations. The study focused on LEP, rather than language of preference and variation may be seen in access and preferences across particular languages (Tagalog, Chinese, and Marshallese). Our sampling frame may have introduced potential bias due to the violation of independence assumption. We also only interviewed individuals able to provide informed consent in the languages of focus in this study. Not all women delivering in Hawai'i meet these criteria and we are thus not representative of all such women. Finally, responses were reported after birth occurred and recall could have been influenced by the passage of time.

Conclusions

Little research exists on how AA/PI populations, especially by LEP, make health care decisions, specifically decisions related to childbirth. Understanding women's decision-making influences when selecting a hospital for birth can help design and target useful interventions to improve the birthing experience. Patterns identified in this study around health decision-making and health communication are also likely relevant across a variety of health outcomes.

Conflict of Interest

None of the authors identify any conflict of interest.

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