

#831: EXAMINING THE RELATIONSHIP BETWEEN HEALTH LITERACY AND SURGICAL DECISION MAKING IN UROGYNECOLOGIC PATIENTS OF PRIMARILY HISPANIC ORIGIN



Grace Sarris BS¹, Suyen Vilchez¹, Akki Gunda MD¹, Veronica Junco BS¹, Christina Yarborough MSPH¹, Ariela Sourojon², Adam Williams MSc¹, Katherine Amin MD¹, Raveen Syan MD¹

1. Desai Sethi Urology Institute, University of Miami Miller School of Medicine, 2. Universidad Anáhuac México

Hypothesis / Aims of study

- Health literacy plays a critical role in understanding and making educated decisions regarding one’s healthcare, especially when given the option to receive surgical vs. non-surgical care.
- Current literature shows:
 - While urogynecology patients have been shown to demonstrate adequate levels of health literacy^{1,2}, these studies predominately examine English-speaking, white women², despite data that indicates Hispanic women carry a larger disease burden from pelvic floor disorders³.
 - Spanish-speaking women tend to have lower levels of health literacy and inadequate understanding of their diagnoses and treatment options⁴.
- Our study aims to explore the relationship between health literacy and surgical decision-making of urogynecology care in our Hispanic minority-majority population.
- We hypothesize that while numerous psychological, sociological, education, and cultural factors affect a patient’s decision to undergo surgery, patients with higher rates of health literacy will prefer surgical treatment despite these factors.
- We hope to ascertain both the literacy and social factors that influence patients’ surgical decision-making, with the goal of identifying potential areas of interventions that can be addressed to improve health literacy and strengthen patient ability to play an active role in shared decision-making.

Study design, materials and methods

- English & Spanish-speaking patients who were offered a urogynecology surgery were offered enrollment.
- 58 patients participated. Participants completed the Short Assessment of Health Literacy (SAHL), a basic demographic questionnaire, and participated in a recorded, semi-structured interview exploring the factors influencing to their medical decision-making.
- Qualitative analysis of the interview transcripts was done using grounded theory and affinity diagramming.
- Continuous and categorical variables were analyzed using a t-test and chi-square test, respectively. A p-value =<0.05 was considered statistically significant.

Results and Interpretation

Table 1. Surgery preferences by demographic				
	All Patients	Elects for Surgery	Declines Surgery	p-value
SAHL scores		16.40 (+-2.08)	16.67 (+-1.86)	0.62
Age				
18-24	2 (3.5%)	0 (0%)	2 (100%)	0.02
25-34	3 (5.2%)	1 (50%)	1 (50%)	
35-49	13 (22.4%)	12 (92.3%)	1 (7.7%)	
50-64	10 (17.2%)	4 (40%)	6 (60%)	
65+	30 (51.7%)	14 (46.7%)	16 (53.3%)	
Race				
Black	9 (15.5%)	25%	75%	0.25
White	37 (63.8%)	56.8%	43.2%	
Asian	1 (1.7%)	1 (100%)	0 (0%)	
Other	11 (19%)	7 (63.6%)	4 (36.4%)	
Ethnicity				
Hispanic	39 (67.2%)	57.9%	42.1%	0.73
Non-Hispanic	17 (29.3%)	52.9%	47.1%	
Prefer not to answer	2 (3.5%)	1 (100%)	0 (0%)	
Birthplace				
Born outside US	17 (29.3%)	61.5%	38.5%	0.10
Born in US	39 (67.2%)	37.5%	62.5%	
Other	2 (3.5%)	1 (50%)	1 (50%)	
Education level				
High school degree or less	12 (20.7%)	7 (58.3%)	5 (41.7%)	0.25
Some college	12 (20.7%)	9 (75%)	3 (25%)	
College degree	19 (32.8%)	7(38.9%)	11 (61.1%)	
Advanced degree	12 (20.7%)	7 (58.3%)	5 (41.7%)	
Prefer not to answer	3 (5.2%)	1 (33.3%)	2 (66.7%)	
Household income				
<\$20,000	10 (17.2%)	6 (60%)	4 (40%)	0.29
\$20,000-\$34,999	11 (19.0%)	7 (63.6%)	4 (36.4%)	
\$35,000 to \$49,999	6 (10.3%)	1 (20%)	4 (80%)	
\$50,000 to \$74,999	5 (8.6%)	4 (66.7%)	2 (33.3%)	
\$75,000 to \$99,999	5 (8.6%)	4 (80%)	1 (20%)	
>\$100,000	5 (8.6%)	1 (25%)	3 (75%)	
Prefer not to answer	16 (27.6%)	8 (50%)	8 (50%)	
Diagnosis				
OAB	16 (59.2%)	31.3%	68.7%	0.03
SUI	11 (40.8%)	72.7%	27.3%	
Type of patient				
New patient	30 (53.6%)	66.7%	33.3%	0.12
Follow up	26 (46.4%)	46.2%	53.8%	

- In total, we had 33 patients elect for surgery, and 27 patients decline surgery.
- The average SAHL was >14 for all race and ethnicity groups, indicating our population demonstrated objectively adequate health literacy.
 - White patients: 16.3
 - Black patients: 17.3
 - Hispanic patients: 16.2
 - Non-Hispanic patients: 17.2
- Further, both those electing (16.4 +/- 1.94) and declining (16.7 +/- 1.86) surgery had adequate health literacy scores.

Table 2: Themes that influence medical decision making elicited in patient interviews				
	# of patients who brought theme up			
Theme	Electing for surgery	Declining surgery	Total	p-value
Comfort with physician	13	2	15	0.004
Definitive treatment	16	2	18	<0.001
Faith	13	4	17	0.04
Independent decision	7	2	9	0.15
Least invasive	2	6	8	0.07
Friends with similar experience	7	0	7	0.01
Sexual dysfunction	4	1	0	0.24
Hospital reputation	4	0	4	0.06
Concern with physical appearance	0	3	3	0.05
History of negative surgical experience	0	3	3	0.05
Familiar with medication	0	3	3	0.05

Table 3. Themes in patient interviews & supporting quotations	
Themes	Supporting Quotations
Patient’s comfort with their physician helps them to feel confident in their decisions.	"[I'm comfortable with] whatever she does because I know she's the best. That's why I made an appointment with her for like a year before, because I knew she's the best of the best."
	"What gives me security is that the doctor is the same doctor... I had surgery with her and well, the entire team, I felt very safe."
Patient’s desire for definitive treatment drives their medical decision making.	"[to use] a pessary or to do anything else, it's just like it's just taking an Advil for a tumor in the brain... I want to fix the problem."
	"I want security, no more wetting myself or wearing sanitary pads at night. Surgery feels like the most secure option. Other treatments require frequent applications, but I want something definitive."
Patient's faith influences their medical decisions.	"I'm Catholic and believe in God and the Virgin. Before coming here, I went to Mass and asked for guidance. I believe my prayers were answered."
	"My faith... believing in God is first. Also, because I put Him on the alter, I put Him there, yes, it is His will that I have surgery."

Conclusions

- Our data showed that among the different groups of patients, there was no statistically significant difference in objective measures of health literacy.
- Further, the mean SAHL scores revealed that our patient population tended to have adequate health literacy levels (represented by a score of 14+).
- Our data suggests that demographic characteristics do not appear to be a significant predictor of a patient’s decision to elect for surgery or not.
- Nonetheless, our patient interviews revealed numerous themes that seem to influence patient decision making, such as trust in their physician and patient’s level of faith.
- These results suggest that in our patient population, patients are adequately understanding their diagnosis and treatment options. Further investigation into the role that social factors play will be critical for better understanding patient surgical decision making.

References

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