

# Spanish language preference is associated with a lower rate of completed psychiatry visits despite a higher rate of psychiatric diagnoses among Hispanic head and neck cancer patients

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## Introduction

- Head and neck cancer (HNC) is a broad group of cancers that encompasses mucosal, salivary, cutaneous, endocrine, sinonasal, and neuroendocrine tumors with wide ranging prognoses and differing treatment algorithms.<sup>1, 2</sup>
- HNC patients face unique psychosocial burdens. The tumors themselves as well as the treatments for the tumors can confer impairment of social and vital functions (e.g. speech, swallowing, breathing) as well as visible aesthetic change. This can lead to distress that in turn affects medical care and outcomes.
- HNC survivors are twice as likely to die from suicide than those with other cancers, and 3-4 times as likely compared to general population. This results in delays in seeking treatment, poor adherence to treatment increased costs, increased health care utilization, and longer hospital stays. Ultimately a poorer quality of life with decreased survival.<sup>3,4,5</sup>
- Further, Hispanic cancer patients report worse psychosocial well-being compared to those of other ethnicities. 85% of Hispanic cancer patients reported psychosocial needs, compared to 70% of non-Hispanic White cancer patients. Studies have found contributing factors to include language barriers, financial challenges, educational disparities, and medical mistrust.<sup>6,7</sup>
- We examine whether language barrier could contribute to worse psychosocial well-being among Hispanic HNC patients.
- First, we test the hypothesis that Spanish language preference is associated with lower utilization of mental health care services among HNC patients.
- Additionally, we analyze the various steps of obtaining mental health care, from referral to visit completion, to identify where service utilization attrition occurs among Hispanic HNC patients.

## Objectives and Hypothesis

- We examine whether language barrier could contribute to worse psychosocial well-being among Hispanic HNC patients.
- We test the hypothesis that Spanish language preference is associated with lower utilization of mental health care services among HNC patients.

## Methods and Materials

- This is a single-institution retrospective cohort study. Inclusion criteria are: 1) an encounter with a HNC ICD-10 code (mucosal, salivary, cutaneous, endocrine, sinonasal, neuroendocrine) and 2) an encounter with specified surgeons and oncologists between February 1, 2020 and January 24, 2025.
- Data regarding demographics and mental health care use were extracted from the medical record. Patients were grouped by language preference, ethnicity, or both. Patients' mental health diagnoses, referrals to mental health care, and completion of mental health care visits were analyzed across groups. Two-tailed Fisher's exact tests were applied for categorical comparisons, with statistical significance defined a priori at the  $\alpha = 0.05$  level.
- This study was conducted under a Columbia University Institutional Review Board-approved protocol (AAAV0325).

Table 1: Select Demographic Data

	Overall (n=3,728)	By Ethnicity*		By Language Preference	
		Hispanic (n=573)	Non-Hispanic (n=2,666)	Spanish (n=323)	Non-Spanish (n=3,405)
Mean age (SD)	64.5 (17.6)	63.5 (17.6)	64.9 (17.6)	70.8 (14.5)	63.9 (17.8)
Gender - No. (%)					
Female	1,986 (53.3%)	319 (55.7%)	1,406 (52.7%)	157 (48.6 %)	1,829 (53.7 %)
Male	1,742 (46.7%)	254 (44.3%)	1,260 (47.3%)	166 (51.4 %)	1,576 (46.3 %)
HNC Type					
Cutaneous	1,410 (37.8%)	112 (19.6%)	1,298 (48.7%)	73 (22.6%)	1,337 (39.3%)
Endocrine	1,175 (36.4%)	221 (38.6%)	1,137 (42.6%)	89 (27.6%)	1,269 (37.3%)
Mucosal and others***	1,081 (29.0%)	266 (46.5%)	815 (30.6%)	175 (54.2%)	906 (26.6%)

\*489 patients' ethnicity was either "declined" or "status not available".

\*\*Other: Mandarin, Russian, Korean, Unknown, Cantonese, Greek, Arabic, Italian, Polish, Bengali, Albanian, Declined, French, Ukrainian, Turkish, Armenian, Hungarian, Hindi, American Sign Language, Dutch, Fulani, Wolof, Toishanese, Portuguese, Hakka-China, and Fuzhou.

\*\*\*Mucosa and others (sinonasal, unknown primary, bone, neuroendocrine, salivary)

Table 2: Intersection of Spanish preference and Hispanic ethnicity

		Hispanic (n=573)	Non-Hispanic (n=3,155)
Spanish-prefering (n=323)	Overall	296 (51.7% of Hispanic, 91.6% of Spanish-prefering)	27 (0.9%, 8.4%)
	Interpreter needed	238 (41.5%, 73.7%)	19 (0.6%, 5.9%)
	Interpreter not needed	58 (10.1%, 18.0%)	8 (0.3%, 2.5%)
	Non-Spanish-prefering (n=3,405)	277 (48.3%) (8.1%)	3128 (99.1%, 91.9%)

## Results

- 573 HNC patients (15.4%) during the study period identify as Hispanic. Among these, 51.7% are Spanish-prefering.
- Hispanic HNC patients are more likely to have psychiatric diagnoses, including existing diagnoses and cancer-related ones (24.4% Hispanic v 16.8% non-Hispanic,  $p=0.0001$ ) (Figure 1).
- Hispanic HNC patients are overall more likely to be referred to psychiatry compared to non-Hispanic HNC patients in the cohort (15.2% v 8.1%,  $p<0.0001$ ) (Figure 2).
- Spanish-prefering Hispanic HNC patients were as likely as English-prefering ones to be referred to psychiatry (14.9% Spanish v 16.5% English) (Figure 2). However, referred Spanish-prefering patients were less likely to have a completed a psychiatry visit. (Figure 2).

## Discussion

- These findings suggest a discordance between the prevalence of mental illness diagnoses and mental health care utilization among HNC patients.
- Among Hispanic HNC patients specifically, Spanish language preference appears to be associated with lower rates of completed psychiatry visits. This could imply that language barrier contributes to the gap in mental health care utilization among Hispanic HNC patients. Notably other contributing and potentially confounding factors are not explored here (e.g. socioeconomic, cultural).
- Next steps are aimed at understanding the gap among Spanish-prefering patients and include a multivariate analysis of language preference and a narrative study interviewing HNC patients and providers about their experiences with mental health care access to understand barriers to care.

Figure 1. Distribution of psychiatric diagnoses among HNC patients

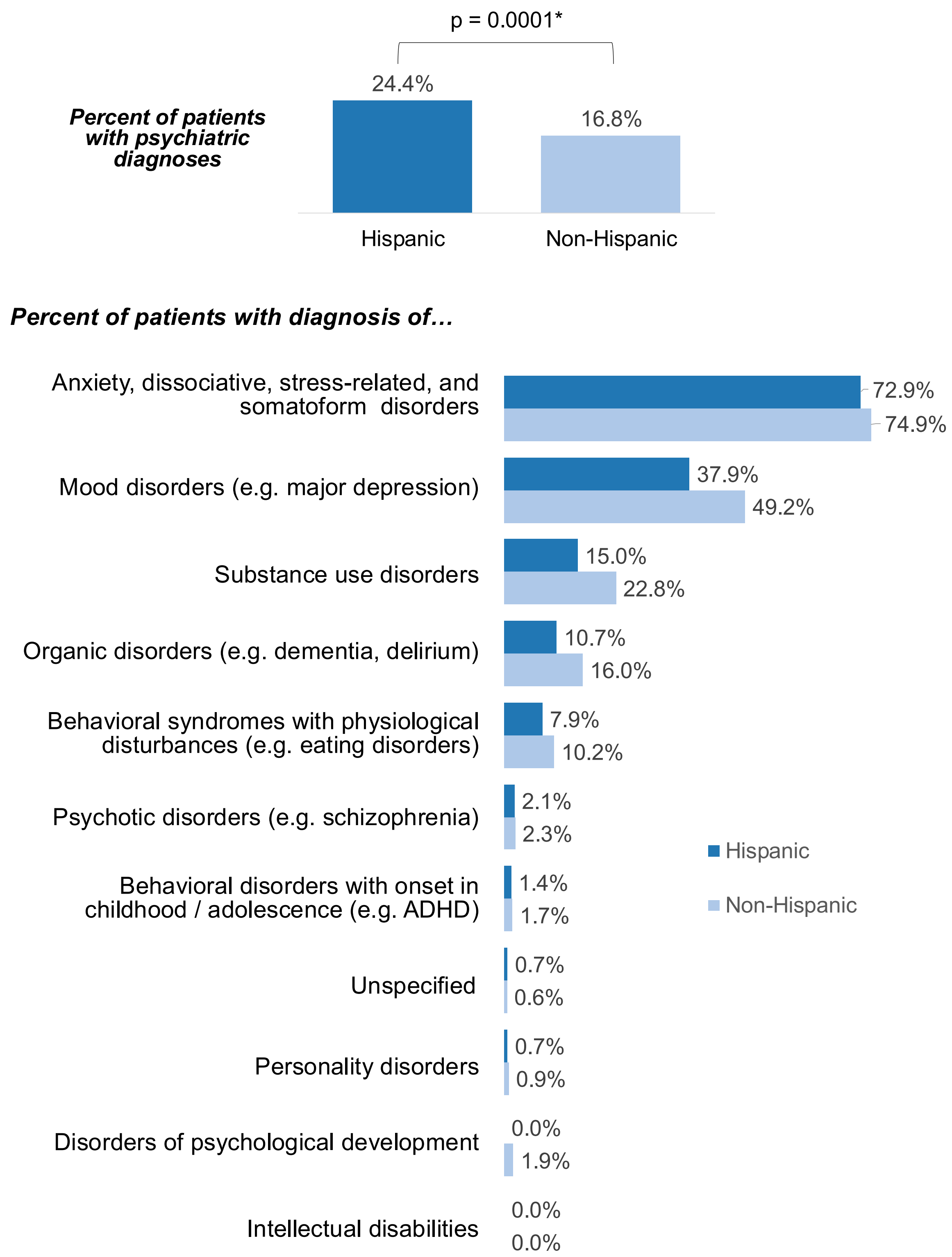
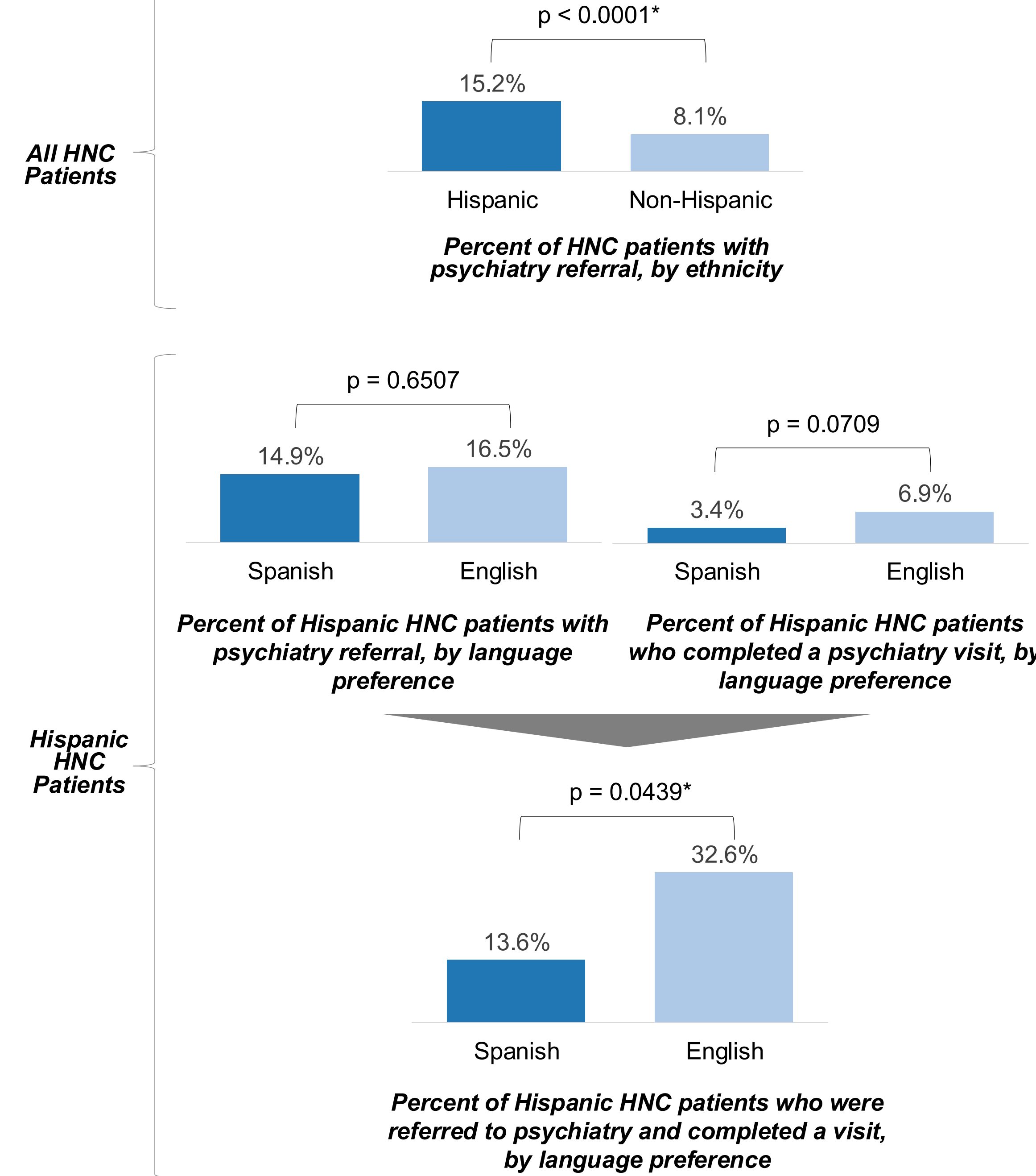


Figure 2. Mental health care utilization among Hispanic HNC patients



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