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ORIGINAL RESEARCH

Barriers to Care in Hispanic American Patients with Diabetic Retinopathy

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BACKGROUND

Diabetic retinopathy (DR) is a leading cause of vision loss in working-age adults. Hispanic patients, who experience higher rates of diabetes, may face barriers to timely ophthalmic care. This study aimed to identify barriers to DR care among Hispanic patients.

METHODS

A cross-sectional survey was conducted at a single, resident-run retina clinic. Hispanic and non-Hispanic White patients with DR completed a verbally administered survey, assessing demographics, disease understanding, and financial challenges.

RESULTS

Eighty-four patients participated (60 Hispanic and 24 non-Hispanic White). Hispanic patients were more likely to have proliferative DR (76.6%, P = .001), live in higher-deprivation areas (P = .018), and rely on financial assistance (90%, P < .001). Commonly reported barriers included transportation difficulties (40%), high surgical/inpatient fees (37%), outpatient visit costs (35%), lost income from time off work (35%), and challenges receiving medical calls during work hours (27% of employed patients). Compared to non-Hispanic White patients, Hispanic patients more frequently cited work responsibilities, food/lodging costs, and surgical fees, and were less likely to report chronic illness as a barrier (P = .038).

LIMITATIONS

The research was conducted at a single, resident-run retina clinic, which may limit generalizability. Self-reported responses were also used and may be subject to recall bias.

CONCLUSIONS

Hispanic patients face multiple systemic and financial barriers to DR care, contributing to more severe disease at presentation. These findings highlight the importance of understanding the challenges that limit access to regular eye care, which may result in delayed diagnosis and more advanced stages of disease when patients first seek treatment.

Introduction

Diabetic retinopathy (DR) is the leading cause of blindness among working-age adults globally. Early detection and intervention can greatly reduce the risk of vision loss and may improve outcomes, though some retinal damage may be irreversible, especially if the disease progresses rapidly or is poorly controlled.[1] The American Diabetes Association recommends annual eye exams for all patients with diabetes to screen for retinal complications. In addition, DR patients may need to see a retina specialist more frequently to manage complications such as diabetic macular edema, making access to follow-up care imperative.

Access to vision care, like other types of health care, is significantly influenced by social determinants of health—particularly for patients with financial limitations or those from racial and ethnic minority backgrounds.[2] Disparities in health care access have been documented extensively, with factors such as socioeconomic status, cultural beliefs, and structural barriers in the health care system affecting utilization and outcomes for certain patient populations.[2-4] According to the 2020 U.S. Census, Hispanic or Latino individuals represent 18.9% of the national population, with recent estimates from the Pew Research Center placing the figure at over 19%.[5] Hispanic individuals also have a diabetes prevalence of approximately 12.1%, making them the second-largest racial or ethnic group presenting with diabetes in the United States. In North Carolina, Hispanic individuals are the fastest-growing population, and in some rural counties, they comprise over 20% of the local population. This demographic shift underscores the importance of understanding health care access among Hispanic communities, particularly in underserved regions.[6-8]

Despite representing a growing portion of the US and North Carolina populations, Hispanic individuals continue to experience significant barriers to accessing health care. A robust body of literature has documented the impact of structural barriers on Latino health equity: lack of health insurance, limited access to linguistically and culturally concordant care, and transportation insecurity.[9,10] Structural racism has also been recognized as a determinant of health disparities, contributing to segregated care systems and differential treatment experiences.[11] These broad, well-established barriers often manifest similarly in specialty care settings, such as ophthalmology, but are less frequently studied in the context of diabetic retinopathy. It has previously been postulated that nearly half of Hispanic patients with diabetes have some form of DR (46.9%), compared to non-Hispanic White patients (26.4%).[12,13] A database study by Huang and colleagues reported that Hispanic individuals with DR were almost 7 times more likely to delay medical care due to being unable to secure child care.[9] The same study found that Hispanic patients with DR reported greater delays in accessing care compared to non-Hispanic White patients despite controlling

for socioeconomic status and other contributing factors.[14] Given the high prevalence of DR among Hispanic Americans and the documented disparities in access to care, this study aimed to identify barriers to DR care in this population and understand how to improve access and utilization of ophthalmic services.

Methods

A cross-sectional survey study was performed at a resident-run retina continuity clinic at the University of North Carolina at Chapel Hill. The study protocol was approved by the University of North Carolina Institutional Review Board and was conducted in accordance with the tenets of the Declaration of Helsinki and Health Insurance Portability and Accountability Act regulations. Consecutive Hispanic American and non-Hispanic White adults with a diagnosis of diabetes presenting to the resident-run retina continuity clinic (supervised by attending physicians) for diabetic eye care were recruited for the study. The term "Hispanic" is used throughout this study to reflect the self-identification of participants, as captured during clinical intake and in the electronic health record.

All study participants gave written, informed consent in person. For participants with visual impairments, the consent form was read aloud by the study staff. Surveys were conducted by 4 trained research team members (SO, GS, DK, and NS), none of whom were involved in the clinical care of the participants. All used a standardized printed version of the survey to ensure consistency. Responses were recorded directly into REDCap, a secure, web-based data capture tool hosted by the University of North Carolina at Chapel Hill. Inclusion criteria consisted of adults aged 18 years or older with a documented diagnosis of diabetes and self-identified ethnicity as either Hispanic or non-Hispanic White. Exclusion criteria included individuals younger than 18, those without a diabetes diagnosis, or those who did not identify with either of the specified ethnic groups.

The survey tool was investigator-developed based on prior literature regarding barriers to care in underserved populations and was adapted to reflect barriers specific to DR management. Survey questions were selected by the study team through consensus, drawing from common domains including transportation, cost, understanding of disease, and ability to attend follow-up care. The final version included 39 questions. The estimated completion time was approximately 10 minutes for participants without language barriers and 30–60 minutes when an interpreter was involved. Data were not collected on education level, country of origin, or primary language, though the survey was administered verbally in the participant's preferred language with use of an interpreter when necessary.

Patients were asked about demographic factors, costs related to attending visits and obtaining medications, transportation challenges, and difficulties arranging someone to accompany them to appointments, which some patients required due to visual impairment, language barriers, or mobility issues. The patient's medical chart was also reviewed for their status of diabetic retinopathy. Pearson chi-square analysis and two-tailed t-tests were performed to analyze differences in demographic factors and reported barriers between Hispanic patients and non-Hispanic White patients. All statistical analyses were conducted using SAS, version 9.4.

Diabetic retinopathy severity was determined based on clinical staging documented in the clinic visit note on the day of study enrollment. All participants were evaluated in the same resident-run continuity retina clinic by a small, consistent group of ophthalmology residents using standardized examination protocols. Staging of DR was based on clinical examination findings, including the presence or absence of neovascularization, retinal hemorrhages, microaneurysms, exudates, and other characteristic signs of disease severity. DR status was categorized into 6 levels following the Early Treatment Diabetic Retinopathy Study (ETDRS) classification: no DR, mild non-proliferative diabetic retinopathy (NPDR), moderate NPDR, severe NPDR, proliferative diabetic retinopathy (PDR), and high-risk PDR.[15] This method ensured uniformity in grading and minimized inter-rater variability. No additional imaging or diagnostic testing was conducted specifically for the study; all staging data were derived from standard clinical documentation.

Area deprivation index (ADI) scores were calculated by mapping each participant's home address to corresponding census block group-level ADI data using the University of Wisconsin School of Medicine and Public Health's Neighborhood Atlas.[16,17] Both national and state decile scores were obtained to reflect relative socioeconomic disadvantage based on factors such as income, education, housing quality, and employment. Addresses were collected during chart review of the electronic health record and matched manually to obtain ADI scores.

A formal sample size calculation was not performed, as this was an exploratory cross-sectional study intended to identify patterns and potential disparities in barriers to DR care. The sample size was determined by the number of eligible patients presenting to the resident-run retina continuity clinic over the data collection period.

Results

A total of 84 participants were included in the study, 60 of whom self-identified as Hispanic and 24 as non-Hispanic White. In total, 140 patients were identified using the inclusion criteria, and 84 agreed to participate in the survey, resulting in a response rate of 60%. Demographic and socioeconomic characteristics differed between groups (Table 1). The average age of Hispanic

participants was 53.9 years, compared to 60.6 years among non-Hispanic White participants (P = .085). The gender distribution was similar between groups, with 58.3% of Hispanic participants and 54.2% of non-Hispanic White participants identifying as male *(*P = .727).

Hispanic participants lived in more socioeconomically deprived neighborhoods, with a higher average state-level ADI decile (6.5 versus 4.5, P = .018). National-level ADI deciles also trended higher among Hispanic participants but were not statistically significantly different from those values in non-Hispanic White patients (70.5 versus 53.5, P = .072). The severity of diabetic retinopathy (DR) at presentation varied significantly by ethnicity. Hispanic individuals were more likely to present with high-risk proliferative DR (63.3% versus 33.3%) and less likely to have no retinopathy (6.7% versus 41.7%) *(*P = .001).

Insurance and payment methods also differed between the two groups. Hispanic participants were more likely to rely on financial assistance programs (68.3% versus 12.5%, P < .001) and to pay out of pocket without insurance coverage ("self-pay"; 21.7% versus 16.7%, P < .001), and less likely to have Medicaid (3.3% versus 37.5%, P < .001), Medicare (1.7% versus 25.0%, P < .001), or private insurance (5.0% versus 8.3%, P < .001). More than half of the Hispanic participants (58.3%) reported being dependent on others for medical expenses, compared to 25.0% of non-Hispanic White participants (P = .006). The average reported monthly income did not significantly differ between groups ($1,735 versus $1,861, P = .129). Most participants in both groups reported access to a car as their primary mode of transportation (95.0% Hispanic versus 91.7% non-Hispanic White, P = .565).

Knowledge about DR was limited in both groups. Only 45% of Hispanic participants and 50% of non-Hispanic White participants reported that someone had taught them about DR (P = .678). When asked about the nature of DR, most Hispanic participants (66.7%) said they were unsure whether the condition was temporary, reversible, or permanent, compared to 42.9% of non-Hispanic White participants (P = .145) (Table 1).

Regarding general difficulty accessing care (Table 2), 40% of Hispanic participants reported transportation to the clinic as "somewhat" or "very" inconvenient, as opposed to 20.8% of non-Hispanic White participants (P = .052). Physical difficulty in coming to the clinic was more commonly reported as "very difficult" among Hispanic individuals (11.7% versus 0.0%, P = .156). Difficulty with the cost of medications was reported at similar levels across groups, with 43.3% of Hispanic and 33.3% of non-Hispanic White participants indicating some or significant financial burden (P = .820). Similar trends were observed for difficulty affording follow-up visits (63.3% versus 54.1%, P = .521).

Table 1. Demographic Factors and Knowledge About Diabetic Eye Disease Stratified by Ethnicity

	Hispanic	Non-Hispanic White	Degrees of Freedom	Test Statistic (χ^2 or t-statistic)	*P* value
Gender	–	–	1	0.12	.727
Male	58.3%	54.2%	–	–	–
Female	41.7%	45.8%	–	–	–
Average age (years)	53.9	60.6	82	1.74	.085
ADI[a]	–	–			
State decile	6.5	4.5	82	2.41	.018*
National decile	70.5	53.5	82	1.83	.072
Diabetic Retinopathy	–	–	5	20.52	.001**
None	6.7%	41.7%	–	–	–
Mild NPDR[b]	0.0%	4.2%	–	–	–
Moderate NPDR[b]	6.7%	8.3%	–	–	–
Severe NPDR[b]	10.0%	0.0%	–	–	–
Non- high-risk PDR[c]	13.3%	12.5%	–	–	–
High risk PDR[c]	63.3%	33.3%	–	–	–
Payment Status	–	–	4	18.47	< .001***
Medicaid	3.3%	37.5%	–	–	–
Medicare	1.7%	25.0%	–	–	–
Private insurance	5.0%	8.3%	–	–	–
Financial assistance	68.3%	12.5%	–	–	–
Self-pay	21.7%	16.7%	–	–	–
Dependent on others for medical expenses	58.3%	25.0%	1	7.52	.006**
Average monthly income	$1735	$1861	82	1.52	.129
Transportation	–	–	3	2.75	.565
Car	95.0%	91.7%	–	–	–
Taxi	1.7%	0.0%	–	–	–
Bus	1.7%	0.0%	–	–	–
Other	3.3%	8.3%	–	–	–
Has anyone taught you about diabetic eye disease?	45%	50.0%	1	0.98	.678
Is diabetic eye disease:	–	–	3	1.92	.145
Temporary	6.7%	9.5%	–	–	–
Reversible	5.0%	4.8%	–	–	–
Permanent	21.7%	42.9%	–	–	–
Not sure	66.7%	42.9%	–	–	–

*$P < .05$

**$P < .01$

***$P < .001$

[a] Area Deprivation Index

[b] Non-Proliferative Diabetic Retinopathy

[c] Proliferative Diabetic Retinopathy

Table 2. Reported Difficulty in Accessing Eye Care Stratified by Ethnicity

	Hispanic (%)	Non-Hispanic white (%)	Degrees of Freedom	χ^2	*P* value
How inconvenient is transportation?	–	–	2	5.97	.052
Not inconvenient	60.0	79.2	–	–	–
Somewhat inconvenient	36.7	12.5	–	–	–
Very inconvenient	3.3	8.3	–	–	–
Given age or physical condition, how difficult is it to come to the clinic?	–	–	2	3.52	.156
Not difficult	53.3	70.8	–	–	–
Somewhat difficult	35.0	29.2	–	–	–
Very difficult	11.7	0.0	–	–	–
How difficult are the costs of your medications?	–	–	3	0.52	.820
Not difficult	50.0	62.5	–	–	–
Somewhat difficult	25.0	20.8	–	–	–
Very difficult	18.3	12.5	–	–	–
Not taking medications	6.7	4.2	–	–	–
How difficult are the costs of attending follow-up visits?	–	–	2	1.48	.521
Not difficult	36.7	45.8	–	–	–
Somewhat difficult	45.0	45.8	–	–	–
Very difficult	18.3	8.3	–	–	–
How difficult is it for you to take time away from home or work to come for visits?	–	–	2	3.61	.161
Not difficult	38.3	62.5	–	–	–
Somewhat difficult	43.3	25.0	–	–	–
Very difficult	18.3	12.5	–	–	–
How difficult is it for you to come in for diabetes follow-up visits?	–	–	2	1.10	.422
Not difficult	51.7	66.7	–	–	–
Somewhat difficult	36.7	29.2	–	–	–
Very difficult	11.7	4.2	–	–	–
How important do you feel it is to attend follow up visits for your diabetic eye disease?	–	–	2	9.21	.011*
Not important	8.3	3.3	–	–	–
Somewhat important	12.5	0.0	–	–	–
Very important	79.2	96.7	–	–	–

*$P < .05$
**$P < .01$
***$P < .001$

Several work- and home-related challenges were also reported by both Hispanic and non-Hispanic White participants. Difficulty taking time away from work or home was rated as "very difficult" by 18.3% of Hispanic participants compared to 12.5% of non-Hispanic White participants (P = .161). Furthermore, attending diabetes follow-up visits was reported as "somewhat" or "very" difficult by 48.4% of Hispanic participants versus 33.4% of non-Hispanic White participants (P = .422). When asked about the importance of follow-up for DR, fewer Hispanic participants rated follow-up

Table 3. Reported Barriers to Care Among Hispanic and Non-Hispanic White Patients

	Hispanic (%)	Non-Hispanic White (%)	Degrees of Freedom	χ^2	*P* value
Which barriers have prevented you from attending a follow-up visit?	–	–	–	–	–
Transportation costs	35.0	29.2	1	0.26	.798
Food & lodging costs	25.0	4.2	1	4.60	.032*
Outpatient fees	35.0	20.8	1	0.57	.297
Surgical & inpatient fees	36.7	8.3	1	5.91	.015*
Lost wages	35.0	16.7	1	2.18	.118
Lost time	26.7	25.0	1	0	1.000
Unable to leave work responsibilities	31.7	8.3	1	4.82	.028*
Unable to leave household responsibilities	15.0	12.5	1	0	1.000
Unable to take leave from caring for a relative	16.7	12.5	1	0.27	.749
General inconvenience	13.3	12.5	1	0	1.000
Lack of someone to bring you to clinic	40.0	33.3	1	0.31	.626
Age-related weakness	8.3	16.7	1	0.62	.268
Chronic medical condition or disability	15.0	37.5	1	4.33	.038*
Incidental issues	28.3	50.0	1	3.12	.077
I wasn't aware of the importance of visits	11.7	8.3	1	0	1.000
Forgot to come	3.3	12.5	1	2.20	.138
Long wait times at clinic	10.0	25.0	1	2.83	.092
Insufficient quality of medical care	6.7	4.2	1	0	1.000
Fear	10.0	0.0	1	1.83	.176
None	16.7	25.0	1	0.47	.375

*$P < .05$
**$P < .01$
***$P < .001$

as "very important" (79.2% versus 96.7%, $P = .011$), with more reporting it as only "somewhat important" or "not important" (20.8% versus 3.3%, $P = .011$) (Table 2).

Specific reported barriers to attending follow-up visits also differed by ethnicity (Table 3). Hispanic participants were significantly more likely to cite food and lodging costs (25.0% versus 4.2%, $P = .032$), surgical/inpatient fees (36.7% versus 8.3%, $P = .015$), and inability to leave work responsibilities (31.7% versus 8.3%, $P = .028$) as obstacles. Both groups cited lost wages as a barrier (35.0% Hispanic versus 16.7% non-Hispanic White, $P = .118$). Other barriers such as transportation costs (35.0% Hispanic versus 29.2% non-Hispanic White, $P = .798$) and lack of someone to accompany them to the clinic (40.0% Hispanic versus 33.3% non-Hispanic White, $P = .626$) were similar between the two groups. In contrast, non-Hispanic White participants more commonly cited chronic medical conditions (37.5% versus 15.0%, $P = .038$) and incidental issues such as scheduling conflicts (50.0% versus 28.3%, $P = .077$) as barriers. The proportion of participants who reported no barriers was 16.7% in the Hispanic group and 25.0% in the non-Hispanic White group ($P = .375$).

Discussion

This study aimed to identify barriers to DR care among Hispanic patients and explore how these obstacles differ from those faced by non-Hispanic White patients. The results demonstrated both similarities and key differences between groups. While both Hispanic and non-Hispanic White patients reported challenges with transportation, clinic costs, and affording medications, Hispanic participants more frequently cited work-related barriers, food and lodging expenses, and surgical costs. These differences suggest that systemic and occupational factors may play a disproportionately larger role in limiting access to care among Hispanic patients with DR.

Prior studies have shown that timely intervention for DR can reduce vision loss by up to 60%, underscoring the importance of regular access to care.[18] The findings of this study are consistent with previous research noting that Hispanic patients are disproportionately affected by DR, with higher rates of disease severity at presentation, more limited access to care, and greater reliance on external support systems. Furthermore, the prevalence of diabetes among Hispanic patients in the United States is approximately 90% higher than in non-Hispanic White patients, influenced by a combination of socioeconomic, genetic, and cultural factors.[19] Prior studies have noted that Hispanic patients are more than twice as likely as non-Hispanic White patients to develop DR, experience earlier disease onset, have higher rates of diabetic vision loss, and have higher severity of DR at baseline.[20,21] Recent national data confirm that this disparity persists; a 2021 study found that Hispanic individuals had a standardized DR prevalence of 29.21% compared to 24.40% in non-Hispanic White individuals.[22] Additionally, a 2024 longitudinal analysis showed that DR prevalence increased disproportionately among Hispanic individuals over time, particularly among men.[23] These persistent disparities underscore the need to identify and address barriers to care in this high-risk population.

Another key barrier identified in this study was the inability to leave work responsibilities, which disproportionately affected Hispanic participants (31.7% versus 8.3%). This aligns with existing research suggesting that individuals from underserved communities often work in jobs that offer limited flexibility, lack paid sick leave, or involve multiple part-time roles—all of which can prevent timely medical follow-up.[24] Additionally, missed work hours compound financial stress, particularly for self-pay patients, and may contribute to both delayed care and disease progression. Given that timely DR management often requires multiple appointments for imaging, treatment, and follow-up, reducing these occupational obstacles—through strategies such as extended clinic hours or employer outreach—may be critical to improving access for working-age adults.

Overall, Hispanic study participants had significantly more severe DR than non-Hispanic White participants. This is consistent with the literature and may be due to delayed presentation. Hispanic Americans are less likely to report seeing a physician in the past year than other adults in the United States, and without regular monitoring and preventive care, DR can go unnoticed until it is severe enough to threaten vision.[25] In addition, Parimi and colleagues reported that Hispanic patients were the group least likely to develop visually significant macular edema, which may lead to patients seeking care later if they do not notice issues with their vision.[26] Furthermore, despite average household income being similar across both groups, the Hispanic patients were significantly less likely to be insured, with a greater reliance on financial assistance programs, and were more likely to report being dependent on others for their medical expenses. Lack of insurance and the financial burden of out-of-pocket medical costs act as deterrents to seeking necessary care and may contribute to the Hispanic patients in this study presenting later with more severe disease. In addition, the Hispanic patient group on average lived in a neighborhood of significantly higher state-level ADI as compared to the non-Hispanic White group, indicating worse overall socioeconomic conditions that may not be captured by average income alone.

Hispanic patients are disproportionately impacted by structural barriers that hinder access to care, a reality well-documented in both national data and peer reviewed literature. In the 2014 National Health Interview Survey, only 46% of Hispanic workers in the United States labor force had access to paid sick days, as compared to 60% of overall workers.[27] Lack of access to paid sick leave makes it difficult for patients to attend follow-up visits as advised, particularly if lost wages are compounded with hidden costs such as food and lodging. The Hispanic group traveled further to the clinic on average, which likely increased the need for food or lodging and contributed to the financial burden of attending visits, even though both groups reported similar difficulty with clinic fees. This is consistent with prior findings that travel burden and related indirect costs disproportionately affect underserved populations seeking specialty care.[28]

One of the most striking findings of this study was the limited understanding among Hispanic participants about the irreversible nature of diabetic retinopathy (DR). Two-thirds of Hispanic individuals (66.7%) reported being unsure whether DR was temporary, reversible, or permanent, compared to 42.9% of non-Hispanic White participants. This knowledge gap may contribute directly to delays in seeking care, underestimation of disease severity, and lower prioritization of follow-up visits. Previous studies have shown that patients' understanding of chronic eye disease is associated with increased adherence to screening and treatment.[29] Educational interventions tailored to patients' language, cultural context, and health literacy levels may be critical to improving DR outcomes in Hispanic communities.

Another important policy-related barrier observed in our study is the limited access to Medicaid coverage among Hispanic participants. At the time of data collection, North Carolina had not yet adopted Medicaid Expansion, which disproportionately affected low-income and uninsured Hispanic residents.[30] In this cohort, 10% of Hispanic participants explicitly cited fear of attending their follow-up visits, compared to 0% of non-Hispanic White participants. This reflects broader concerns related to immigration status, public charge policies, and historical mistrust, all of which may discourage individuals from seeking medical care. Addressing this gap through inclusive state-level policy reform and community education may reduce barriers to care.

This study has several limitations. As with any single institution study, there is risk of sampling bias. The survey was conducted exclusively at a single, resident-run retina continuity clinic, which may not reflect the experiences of patients seen in other types of clinical settings, such as private practices or other academic clinics. However, because both Hispanic and non-Hispanic White participants received care at the same publicly funded, safety-net institution—which serves low-income and uninsured patients—their responses can be directly compared within a shared care setting to identify differences in reported barriers, thereby highlighting racial and ethnic disparities in access to care. As this study took place at a safety-net clinic associated with the University of North Carolina at Chapel Hill, which provides income-based financial assistance to uninsured or underinsured patients to help cover the costs of appointments, procedures, and medications, the sample may disproportionately represent individuals facing financial hardship.

Moreover, this is a survey study and relies on accurate verbal responses from participants, which were recorded by trained research team members administering the survey. An interpreter was used for non-English-speaking patients to ensure clarity, but responses may still be influenced by variation in individual recall or interpretation. There are complex factors affecting follow-up that are difficult to measure by direct survey, such as cultural differences and language barriers. This study attempted to bridge the language barrier by using an interpreter to communicate with each patient in their preferred language, but the survey questions did not address possible culturally influenced attitudes towards medicine and physicians.

Furthermore, the findings from this population may not be fully generalizable to all Hispanic patients, as regional differences, immigration status, health literacy, and health care infrastructure can vary significantly across the United States. Future multi-center studies involving diverse geographic regions and a broader range of clinical settings—including private practices, academic centers, and community clinics—are needed to better understand the national landscape of barriers to diabetic eye care in Hispanic populations. Such efforts would help develop more tailored interventions

that address both local and systemic factors contributing to disparities in care. Finally, although interpreter services were used throughout the study to ensure accurate communication during consent and survey administration, none of the research team members were bilingual or bicultural. This may have limited the team's ability to fully capture cultural nuance during participant interactions and survey development and should be considered when interpreting the findings.

Conclusion

This study demonstrated that Hispanic patients experienced disparities in access to care and had more severe DR than non-Hispanic White patients. Factors such as financial constraints, work responsibilities, and inadequate diabetic eye disease education prevent some Hispanic patients with diabetes from accessing the follow-up care they need. Despite similar average incomes, Hispanic patients in this study were more likely to be uninsured, rely on financial assistance, and live in more socioeconomically deprived neighborhoods—all of which contribute to delayed DR care and increased severity of disease at presentation.[18] These findings highlight the need for targeted interventions to address both local and systemic barriers, including expanding Medicaid enrollment outreach, offering flexible appointment hours to accommodate work-related conflicts, incorporating bilingual patient education on diabetic retinopathy, and integrating interpreters and culturally competent staff into scheduling teams and routine ophthalmic care. These strategies may be especially impactful in regions like North Carolina, where access disparities are compounded by policy gaps and demographic shifts.

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Conflicts of Interest

There are no conflicts of interest to report.

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