

Confident Care, Healthier Smiles: Improving Spanish-Language Oral Health Education

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Introduction

Growing Hispanic Population

- 63.7 million: U.S. Hispanic population in 2022.¹
- North Carolina: Hispanic population has been the fastest growing since the 1990s.²

Healthcare Disparities

- Higher rates of being uninsured among Hispanics, Blacks, Asians, and Native Americans.³
- Hispanics had the lowest rate (28.81%) of visiting a dentist in the past 6 months.⁴
- 2019: Study shows poorest oral health among Hispanics.⁴

Language Barriers

- Hispanics feel more comfortable visiting a dentist with whom they can effectively communicate both culturally and linguistically.⁵
- Dental Spanish oral hygiene instruction (OHI) resources in dental (DDS) and dental hygiene (DH) education are limited.

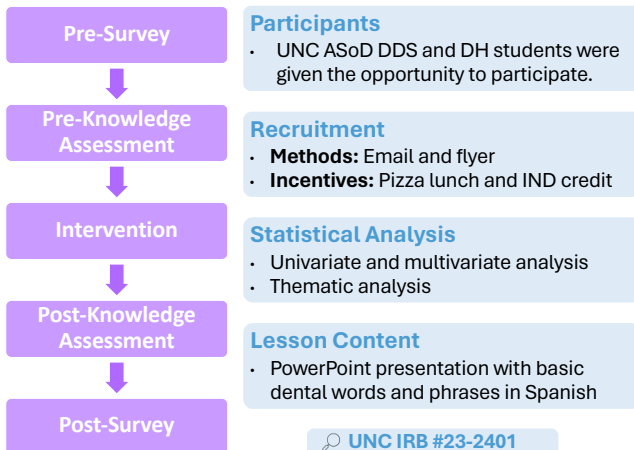
Purpose

- To determine the **knowledge** and **attitudes** of DDS and DH student providers when treating and delivering OHI to Spanish-Speaking patients (SSPs).

Abstract



Methods



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Figure 1: OHI in Spanish Lesson Presented by Dr. Carolina Vera. Photograph captured by Chris Pope.

Results

Total Number of Participants

Surveys: n = 42
 Knowledge Assessments: n = 60
 Scores Pre- and Post-:
90% → 98%*

Participant Demographics

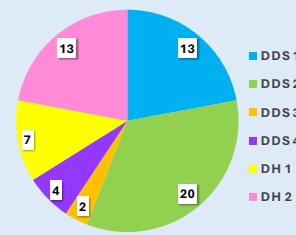


Figure 2: Participant Demographics: The total number of participants who completed the pre- and post-surveys.

Experience With Spanish
 Fluency With Speaking Spanish: 7.02% (n = 4)
 Studied Dental Spanish: 7.02% (n = 4)

	Confidence Pre-Survey	Confidence Post-Survey	Willingness Pre-Survey	Willingness Post-Survey
Using dental terminology with SSP:	28.57% (n = 12)	97.61% (n = 41)	97.62% (n = 41)	97.62% (n = 41)
Providing OHI with dental terms in Spanish to SSP:	35.72% (n = 15)	92.85% (n = 39)	97.62% (n = 41)	97.62% (n = 41)
Communicating with SSP in Spanish:	38.09% (n = 16)	85.71% (n = 36)	Table 1: Confidence and Willingness Pre- and Post-Surveys.	
Treating SSP in English:	90.47% (n = 38)	97.62% (n = 41)	Overall increase in confidence in all categories.	
Treating SSP in Spanish:	28.57% (n = 12)	71.43% (n = 30)		

Qualitative Data

Communication

"No matter how many times I explained it, the patient didn't seem like she understood what I was trying to say or what I recommended for treatment."

Language Barriers

"When I started explaining their health status using dental terminology, they looked confused but still nodded their head as if they understood. I assume that they didn't want to cause any difficulties by asking for an interpreter."

Connection

"I feel disconnected from my patients when I need an interpreter."

Confidence

"I want to be able to feel confident in communicating treatment plans, diagnosis, and oral hygiene instructions to my patients who speak Spanish."

Interpretation

"I have to fully trust that they will accurately translate my instructions, explanations, and questions... I cannot fully determine my patient's thoughts and feelings regarding the conversation."

Spanish Learning

"I hope to attend more sessions like this one to learn more terminology and practice speaking with my peers before treating patients."

Conclusions

General Conclusions

Overall increase among DDS and DH students from pre- to post-lesson in:

- Basic Spanish OHI **knowledge**
- **Confidence** with using basic dental Spanish terminology

Future Directions

- Include other topics in lesson
- Increase frequency and duration of sessions
- Leverage existing resources like HSDA's Conversation Cafés
- Re-evaluate knowledge and confidence after longer period of time

Limitations

- Single and short session
- Short-term evaluation
- Small sample size limited to one university

Acknowledgements & References

Acknowledgements

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References

1. US Census Bureau. Hispanic heritage month 2023 [Internet]. U.S. Department of Commerce; 2023 August [cited 2024 February]. Available from: <https://www.census.gov/newsroom/facts-for-features/2023/hispanic-heritage-month.html>
2. Cline M. Hispanic population is fastest growing population in North Carolina [Internet]. NC Office of State Budget and Management; 2023 May [cited 2024 February]. Available from: <https://www.osbm.nc.gov/blog/2023/05/01/hispanic-population-fastest-growing-population-north-carolina>
3. Carratala S, Maxwell C. Health disparities by race and ethnicity [Internet]. Americanprogress.org; 2020 May [cited 2024 February]. Available from: <https://www.americanprogress.org/article/health-disparities-race-ethnicity/>
4. Han C. Oral health disparities: Racial, language and nativity effects. SSM Popul Health. 2019 Aug;8:1004-36.
5. Ramos-Gomez F, Kinsler J. Addressing social determinants of oral health, structural racism and discrimination and intersectionality among immigrant and non-English speaking Hispanics in the United States. J Public Health Dent. 2022 June;82(S1):133-9.