

VII MOLA LATIN **2023**
HEALTH SYMPOSIUM
IV MEDICAL SPANISH SUMMIT
BRIDGING THE GAP THROUGH **CONNECTIONS**

Abstract
Book

ABSTRACT BOOK 2023

The Abstract Book is an annual publication of abstracts that were peer-reviewed and selected for poster or oral presentation at the VII Latino Health Symposium and IV NAMS Medical Spanish Summit, the annual academic conference of the Medical Organization for Latino Advancement (MOLA) and The National Association of Medical Spanish.

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EDITORIAL

The Medical Organization for Latino Advancement MOLA is committed to disseminate the academic innovative work pursued by our members, including physicians, trainees, researchers, public health professionals, and students. This year MOLA Scholar's work

shows a robust alignment with our Mission focused on career advancement, linguistic and cultural competency, personal wellness, advocacy and health equity for the good of the entire Latino/a/e/x community (hereafter Latinx) . This year's Latino Health Symposium, organized in partnership with the National Association of Medical Spanish NAMS, and The Latino Medical Student Association LMSA, was hosted by MOLA's partner: Rush University Chicago on October 13th and 14th. With more than 650 participants, the two day program included 37 Speakers, including 12 oral presentations. The Poster session had a record 65 fascinating projects posters covering linguistic, cultural, clinical and other competences in several clinical and academic health fields. A couple of years ago, one of my predecessors, Dr Pilar Ortega highlighted on this report "historical views and actions that have led to discrimination based on race, ethnicity, language, and other factors, we chose to focus our Symposium on using our unique identity as a source of power and healing. Our theme -- "Bridging the gap through connections" -- was highlighted throughout the event to help us dig deep into the diverse and intersecting aspects of who we are as individuals and as a community of MOLA Latinx professionals. It is with great orgullo in our community of professionals and students that we submit this report highlighting the abstracts, many of which I am certain will lead to successful publications, new research ideas, and impactful solutions to the health issues that affect our underserved Latinx community. MOLA's Symposium is one of few academic events in the nation that features health-related academic work and community solutions by Latinos, for Latinos. To keep up to date on MOLA's news and announcements, please visit www.chicagomola.com On behalf of MOLA's Board of Directors and Scientific Committee, we extend a heartfelt ¡enhorabuena! to all our poster and oral presenters and wish you sincere success in all your future endeavors at improving health equity and workforce diversification for Latinos in the U.S. and beyond. ¡Muchísimas gracias!

Óscar Iván Zambrano, MBA, MPH
MOLA President

A message from RUSH students

Expanding the visibility of Latinx professionals within healthcare is one of the primary goals of the annual Latino Health Symposium. This gathering of innovative thinkers and community leaders was created by the Medical Organization for Latino Advancement (MOLA), a non-profit association of Hispanic/Latinx physicians and health professionals working for career advancement, linguistic and cultural competency, personal wellness, and health equity for the good of the entire Hispanic/Latinx community. For the past seven years, the symposium has provided a platform that allows Latinx students, providers, researchers, and advocates to display their scientific achievements and foster conversations that center around advancing this community as a whole.

For 2023, Rush University Medical Center has taken on the pivotal role of hosting the seventh annual symposium. This partnership is a result of student leaders promoting their vision for expanding the presence of Latinx representation within their institution. For decades, Rush has been a pioneer in leading efforts to dismantle health barriers, as well as training the next generation of health care providers that address social disparities of health. The journey to medical school is a challenging, uphill battle that often places numerous obstacles on the paths of students from underrepresented backgrounds. With just 12% of medical school students and 7% of all physicians coming from a Latinx background, this journey is often met with self doubt and feeling underqualified. Similar sentiments are echoed throughout the various health-related career paths Latinx students embark on. Current medical students at Rush first learned about MOLA and their efforts throughout Chicago at the regional Latino Medical Student Association (LMSA) held at Northwestern University in 2022; they immediately saw value in magnifying the voices of Latinx individuals within healthcare and pitched their vision to leaders at MOLA and Rush. After almost two years of collaboration, we are proud to see them getting together to host this, the VII Latino Health Symposium.

As Latino students ourselves, we (Carlos Escutia Rosas & Alvyn Hernandez Reyes) chose to continue our dreams of becoming physicians at Rush because of the university's mission to serve the community in which it is located through integration of outstanding patient care and community partnerships. This mission is carried on by the people at Rush who demonstrate in their professional and personal lives that the health of *nuestra comunidad* matters. We knew that having a conference that highlighted Latinx excellence was an opportunity to continue to bring forth and attract more Latino students/healthcare workers to serve a community that looks like them; in other words, bridging the gap between healthcare and the Latino population. We wanted to do our part in continuing the mission of giving back to our community and that is what led to us taking the initiative to pitch MOLA the idea to have their VII annual Latino Health Symposium here at Rush Medical Center.

On behalf of MOLA's Board of Directors and Scientific Committee, *les damos gracias* to all of the poster presenters, speakers, workshop leaders, and community as a whole for making this conference possible. Your work continues to build on the foundation that shapes the care for healthcare altogether and with people like you, the Latinx population is in good hands. Thank you once again for being part of the conference and we look forward to continuing to feature your work at next year's Latino Health Symposium!

¡Muchísimas gracias!

Carlos Escutia Rosas and Alvyn Hernandez Reyes
Rush Medical Students

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MOLA ORAL PRESENTATIONS



MOLA ORAL PRESENTATIONS

Saturday, October 14th, 2023

Cancer Track



Factors Influencing Time to Treatment Delay In Breast Cancer Patients

Carmin Munoz: She/her/hers

- Student
- Rush Medical College
- *Co-author:* Dr. Rosalinda Alvarado

Background: Breast cancer is one of the most common malignancies in women. Unfortunately, health disparities exist among Latinas and African American women who may present with late-stage breast cancer or delay treatment initiation. Time to treatment delay is important to evaluate as even a delay of 6 weeks in starting breast cancer treatment has been associated with worse survival outcomes. In the literature, these disparities have been attributed to socioeconomic and demographic factors. However, there's no clear consensus on which factors are most significant.

Objective: This study aims to understand which factors are most significant in causing time to treatment delay in breast cancer patients from the time of diagnosis, as confirmed by pathology, to the first treatment (surgery, radiation, hormone therapy) within the last year at an academic institution. This study aims to particularly focus on outcomes in Latina women.

Method: Retrospective chart review to look at factors that might impact time to treatment delay such as primary language, race/ethnicity, health insurance, zip code, clinical stage of tumor, and type of treatment received. Time to treatment delay will be measured by the interval from the date of diagnosis to the date of starting a breast cancer treatment.

Results: Pending summer project outcomes.

Conclusions/Impact: By characterizing the most significant factors causing time to treatment delay, interventions to allocate resources and improve timely treatments could be implemented. If time to treatment delays can be understood as a proxy for healthcare access, these findings will underline a troublesome trend for minority populations, which must be further understood to develop future interventions.

Chronic Diseases Track



Consejo Comunitario: Lessons Learned in Community Exploration of Latine Mental Health Needs in Kansas

Kelly Guzman She/Her/Ella:

- Bilingual Mental Health Clinician/Social Worker
- Wichita State University



Rommy Vargas-Bezzubikoff She/Her/Ella:

- Master of Education, Master of Spanish
- Institutional Affiliation: Alce Su Voz/Spanish Ad Hoc Translations
- Director of Education and Engagement of Interpreters of Alce Su Voz at Wichita State University
- *Co-Authors:* Rachel Showstack, Ph.D., Associate Professor of Spanish and Linguistics and founder of Alce Su Voz at Wichita State University

Just as the voices of Latine patients have been largely excluded from the Latine health research until recently, there is limited documentation of the inclusion of patients with "limited English proficiency" in community health improvement plans. Engaging the voices of monolingual and bilingual Latine stakeholders is an important step toward understanding Latine mental health needs and advancing health equity.

As part of a larger effort to improve health equity for linguistically marginalized communities in Kansas, we engaged with 40 Spanish-speaking Latine community members in a *consejo comunitario*, a community council meeting, in May 2023 to listen to stakeholders experiences with access to mental health care services. Participants engaged in debate explored mental health needs and the factors that affect Latine access to and use of mental health services and shared testimonies, and stories about their own experiences with access to care that were often coupled with a call to action. In addition, some participants offered suggestions about the next steps in mental health service delivery and engagement efforts for Spanish speakers in Kansas.

Solutions proposed by Latine stakeholders included the creation of support or self-help groups and strengthening patient-provider communication.

University-clinician-community coalitions to address mental health equity can link Latine families to immediate mental health resources, promote mental health help-seeking, and create a support space to explore components of mental health stigma in the Latine community. A secondary outcome may be inspiring Latine community members to pursue informal or formal training in mental health.



Understanding Utilization of Alzheimer's Disease Services Among Latinos from a Primary Care Provider Perspective

Diana Martinez Garcia

- Research Assistant
- University of Wisconsin - Madison / UW Health
- *Co-author: Maria Mora Pinzon MD, MS, FACP*

Background: Even though 80% of primary care providers (PCPs) are the first point of contact for patients, they do not feel comfortable diagnosing dementia and often feel they lack the resources to help families with an Alzheimer's Disease and Related Dementias (ADRD) diagnosis.

Objectives: The purpose of this study is to examine the perceptions that PCPs have about the barriers and limitations that Latinx communities have to receive care for ADRD and to determine how PCPs can create a safe and encouraging space for the Latinx community to seek preventive care or early diagnosis of ADRD.

Methods: The data was collected through interviews with 23 primary care providers across the USA. Interviews were conducted via Zoom video calls. A deductive qualitative content analysis will be used to explore the themes expressed by PCPs according to Anderson's framework for healthcare utilization. Data analysis will be done using the Rigorous and Accelerated Data Reduction (RADaR) technique which pulls out relevant data that can be put into different specific categories.

Results: Upon completion, we believe PCPs will explore the following aspects as key in their processes of serving the Latinx community: occupation of the individual, insurance coverage, and family immigration history. PCPs are trusted sources of information for Latinx communities, by strengthening the relationship between them and the individuals, we could explore new ways to increase awareness about ADRD, facilitate diagnosis, and make management culturally appropriate.

Impact Statement: Considering that the number of Latinx individuals that will experience ADRD will increase by 800% by 2060 and that PCPs are usually involved in the management of 80% of the cases, it is imperative to address the barriers faced by PCPs to improve the health and quality of life of people with ADRD and their families.



MOLA POSTER PRESENTATIONS

MOLA POSTER PRESENTATIONS

Listed in alphabetical order by presenter's last name

Clinical Outcomes of Pediatric Patients with ARDS In a Non-ECMO Healthcare Center

Pamella Abreu Lozada: she/her

- Medical Student Research Investigator
- Department of Pediatrics, UPR-RCM School of Medicine, San Juan, Puerto Rico

Gabriela Cátala Rivera: She/her

- BA, MPH
- UPR-RCM School of Medicine, San Juan, Puerto Rico

Andrea Oyola Suárez: She/her

- BS
- UPR-RCM School of Medicine, San Juan, Puerto Rico

Kalisha Ortiz Flores: She/her

- BS
- UPR-RCM School of Medicine, San Juan, Puerto Rico
- *Co-authors:* Dr. Ricardo García De Jesús, MD. Laura C. Rivera Dávila, MD. Rolando J. Encarnación Guzmán, MD. Krystal Miranda Aponte, MD. Dr. Anabel Puig, PhD. Fabiola Ortega Guzmán, BS. Patricia González-Vega, BS. Edwin Medina González. Department of Pediatrics, UPR-RCM School of Medicine, San Juan, Puerto Rico

Background: Acute Respiratory Distress Syndrome (ARDS) is an acute lung injury associated with alveolar edema, diminished airway compliance, and hypoxemic respiratory failure. Although ARDS outcomes have improved, managing these patients is one of the most challenging pathologies in intensive care units (ICU). Consequently, mortality and morbidity remain significantly high among pediatric patients admitted to ICU. In cases of severe ARDS, an extracorporeal life support therapy known as Extracorporeal Membrane Oxygenation or ECMO has risen as an alternative rescue therapy.

Objectives: To quantify and determine the clinical characteristics and survival outcomes of pediatric patients with ARDS admitted to the Pediatric Intensive Care Unit of Puerto Rico's Pediatric University District Hospital.

Methods: In this retrospective medical chart review, descriptive and clinical data were collected from pediatric patients with a medical diagnosis of ARDS, among ages older than 30 days and younger than 18 years old, who were admitted to the Pediatric Intensive Care Unit at a tertiary hospital in Puerto Rico from July 2015 to December 2020.

Results: During the study period, 16 patients met the ARDS criteria (0.9%), of which only 3 (19%) patients met the severity criteria. The etiologies for ARDS were: Pneumonia (37.5%), Viral Illness (31.2%), Sepsis (18.8%), Trauma (6%), and Anaphylaxis (6%). Patients with ARDS required the following clinical support: Inotropes

(87.5%), Steroids (68.7%), Diuretics (93.7%), Mechanical Ventilation (81%), or (44%). However, severe ARDS patients required 100% assistance from Inotropes, Steroids, Diuretics, Mechanical Ventilation, and 44% of iNO.

Conclusions & Impact: The availability of ECMO support systems is limited to specialized health institutions, making it harder for tertiary hospitals to include it as a therapeutic alternative. Consequently, critical care

experts continue applying conventional treatment protocols as the main therapeutic regimen for ARDS patients. Despite ECMO not being a feasible option for our patients, conventional therapy results in survival of 62.5% and 67% in patients with ARDS and severe ARDS, respectively. Among the survivors, 12.5% required oxygen support after discharge. The most common etiologies of ARDS were infectious. Further studies are needed to analyze the association between medical interventions and outcomes.



Bridging the Gap: Bringing Diversity and University Providers into Marginalized Communities: Increasing Access to Vision Screening for Youth in the Madison Metropolitan School District

David Aguilar

- Undergraduate Researcher
- UW-Madison School of Medicine and Public Health and Department of Ophthalmology and Visual Sciences

- *Co-authors:* Maria Jabbour, B.S (she/her). Cat Burkat MD FACS, Tetyana Schneider PHD

Background: A significant number of elementary and middle schools are unable to provide timely vision screenings to students, which could ultimately affect eye development, school education, and social issues. Additionally, some students lack access to healthcare and may be unable to have independent eye exams, thus reinforcing the importance of school vision screenings to identify any visual concerns early. Certified eye providers are often too busy to travel to a school to provide free screening.

Objective: This program sought to decrease socioeconomic barriers when it comes to vision care, establish a volunteer program that continues yearly, screen as many children as possible; give back to the community, and assist overburdened school nurses. We have now contracted with the Madison Metropolitan School District to continue this project yearly and plan to expand to other local communities in need such as the Allied Wellness Center. In addition, during the pandemic, college students were unable to gain the shadowing experience normally available in doctors' clinics to gain medical exposure.

Methods: In the spring of 2022, college and medical school student volunteers from various DEI organizations screened over 2000+ students in 6 elementary schools and 1 middle school. We retrieved information about student demographics from the Madison Metropolitan School District website to better understand the population screened.

Results: 5 out of 7 schools had more than 25% of their student populations indicated as economically disadvantaged. 4 out of 7 schools had more than 25% of their student populations indicated as first-time English learners.

Conclusion: Through the vision screening program, we aspire to make vision screenings more accessible to underserved ethnic/racial and low-income students in the Madison area. We are planning on expanding the vision screening program to focus on Latinx populations in non-academic settings. A partnership with the Allied Wellness Center is underway to screen underserved Latino populations in Fitchburg,



Characteristics and Post-Injury Community Reintegration of Hispanic Adults with Burn Injuries: A Burn Model System Cohort Study

Tamara Alcala Dominguez: She/her

- BS/BA, Medical Student
- University of Washington School Of Medicine
- *Co-authors:* Kara A. McMullen MPH, Caitlin M. Orton MPH, Haig Yenikomshian MD, Elizabeth Flores BA, Jeffrey Schneider MD, Jonathan Moreira MD, Colleen Ryan MD, Barclay T. Stewart MD, PhD, MPH

Background: An objective of post-burn injury treatment programs is to restore patients to their pre-injury level of biopsychosocial function, enabling them to reintegrate into their previous community roles. Yet, despite ethnicity and socioeconomic status (SES) being strongly associated with numerous burn outcomes, no study has examined the intersectionality of community reintegration factors on burn recovery experiences of Hispanic adults.

Objective: To describe the associations between Hispanic ethnicity and SES in relation to community reintegration post-injury.

Method: Adult participants enrolled in a multicenter longitudinal database from 2015 to 2023 who had self-reported ethnicity, education, and income data were analyzed. SES was classified as low, average, or high based on education and/or annual household income. Low SES defined as no high school diploma/GED or income \leq \$49,000, average SES defined as high school diploma/GED or income of \$50,000-\$99,999, high SES defined as some college or trade school or income $>$ \$99,999. The social integration subset of the Community Integration Questionnaire (CIQ) and employment status at follow-up assessed community reintegration. Kruskal Wallis tests were used to analyze CIQ differences between subsets of Hispanic and non-Hispanic participants with low, average, and high SES. Cross-sectional logistical regression models were used to determine the association between ethnicity, employment status, and SES at 6-months, 12-months, and 24-months post-injury

Results: 952 adults were analyzed of whom 20% identified as Hispanic with a mean age of 41 years. The majority (65%) reported income \leq \$49,999; 18% reported income \geq \$99,999. Almost half (47%) reported less than a high school education and 12% had some college. A third of Hispanic participants were low SES (34%), 39% were average SES, and 27% high SES. The non-Hispanic cohort averaged 48 years. Less than half reported an income $<$ \$49,999 (41%) and 40% reported income of \geq \$99,999. Fifteen percent had less than a high school education and 41% had some college. Non-Hispanic participants were more likely to have high SES (61%) and average SES (31%) ($p < 0.001$). Despite notable disparities between the Hispanic and non-Hispanic cohorts, the sub cohorts within Hispanic and non-Hispanic (low, average, high SES) groups showed no significant differences in CIQ scores after applying Bonferroni's correction due to multiple comparisons. Likewise, there was no association between employment status and ethnicity or SES at all timepoints post-injury.

Conclusions & Impact We found no statistically significant relationships between Hispanic ethnicity and SES with CIQ over a period of 24-months post-injury. However, our results highlight predictable SES risk factors that contribute to the systemic disparities that Hispanics face in achieving pre-injury recovery.



Analyzing Barriers To The Utilization of Mental Health Resources In The Latino Community

Ashley Alvarado: She/her

- 2nd-year Medical Student
- Indiana University School of Medicine
- *Co-authors:* Niki Messmore- Director of Community and Civic Engagement at Indiana University School of Medicine

Background: Latino individuals are less likely to utilize mental health resources despite being equally as likely to experience mental illnesses as non-Latino whites. There is not a great amount of information on the barriers to resources for Latinos in central Indiana. Understanding which barriers have the greatest effect in preventing Latinos from obtaining care for their mental health concerns will allow for the appropriate services to be put in place to address these barriers. La Plaza is a Latino organization that provides health and social services to the community in central Indiana. Learning the needs of the community will allow La Plaza to provide the mental health services that will best support those needs.

Methods: Caregivers of children who attend the Summer Discovery Program at La Plaza will be surveyed to determine their education of depression and their access to mental health resources. The children will not be directly involved in the study. The survey will be sent out to the caregivers through a text group where they regularly receive information about the program. The study will be explained and all required permissions will be obtained. The survey takes about five minutes to complete. Once survey results are analyzed, they will be used to determine how organizations like La Plaza can provide education and resources to the community.

Results: Pending Summer Project Outcomes

Conclusion/Impact: Lack of education and inequities in access to mental health resources are two of the main barriers that prevent the Latino community from utilizing mental health resources. Providing more funding to Latino nonprofit organizations for mental health resources can aid in removing these barriers. To provide education on mental health to the community, organizations can provide pamphlets to their clients and provide training to their staff on how to recognize mental illnesses. Nonprofit organizations can also use funding to hire a full-time therapist and social worker to directly provide resources to those who need them.

Demographic Factors Associated with Behavior Flags in the Emergency Department

Lizbeth Alvarez

- Medical Student / 2023 MOLA Scholar
- University of California Davis School of Medicine
- *Co-authors:* Francisco Iacobelli, Associate Professor, Department of Computer Science. Northeastern Illinois University. Bryn E. Mumma, MD, MAS Associate Professor, UC Davis Department of Emergency Medicine

Background: "For Your Information (FYI)" behavior flags in the electronic health record (EHR) are used to alert clinicians that a patient has a history of potentially unsafe or aggressive behavior. Disparities in health care for racial and ethnic minorities are well known, contributing to poorer experiences with the health care system and leading to worse outcomes. The differential treatment of patients according to race has been found in the use of restraints for patients being treated for psychiatric emergencies. Currently, there are no formal guidelines for placing FYI behavior flags, so these flags are placed at staff discretion. It is unknown whether disparities are present in the use of FYI behavior flags.

Objectives: Aim 1: To quantify the association between the presence of a pre-existing FYI behavioral flag on the electronic health record with patient race and ethnicity.

Aim 2: To quantify the association between the placement of a new FYI behavioral flag on the electronic health record with patient demographic and clinical (diagnoses) variables.

Aim 3: To quantify the association between age at placement of the first FYI behavioral flag on the electronic health record with patient race and ethnicity.

Methods: This is a retrospective cohort study that will use electronic health record data of all patients aged 13 and older who presented to the UC Davis ED during the five years from July 1, 2018, through June 30, 2023.

Anticipated Data: The primary outcome variables will be the binary yes/no measures of the presence of (update) behavioral flags in the patient electronic health record for Aims 1 and 2, respectively. For Aim 3, the primary outcome will be the continuous outcome of age at the placement of the first FYI flag. The primary predictor will be race/ethnicity as curated by the UCD Data Center of Excellence. This curation process mapped the many race and ethnicity options that are self-selected by patients into standard categories per federal guidance.

Impact Statement: FYI behavior flags may introduce bias and understanding how they are used is imperative to ensure equitable care, especially among BIPOC communities.

Illinois Unidos: Commitment of Community Health Workers during COVID-19

Lisa Aponte-Soto

- President
- DePaul University
- *Co-authors:* Aponte-Soto, L., Vergara-Rodriguez, P., Del Rios, M., Zapata, M., Simon, M., Giachello, A.

Objective: (1) To document the work of community health workers in Chicago, particularly the Illinois Unidos Promotores de Salud Program, and address relevant challenges related to COVID-19 testing and vaccination receptivity. (2) To leverage lessons learned to implement a culturally and linguistically appropriate COVID-19 community outreach and education campaign.

Methods: A descriptive study design based on eleven 90-minute Spanish language focus groups was conducted with promotores from 14 community-based organizations in Chicago, IL from August to October 2021 to assess common themes related to COVID-19.

Results: Thematic analysis of the focus groups unveiled COVID-19 vaccine-related myths, misconceptions, and concerns including government conspiracy, disbelief in vaccine efficacy, religiously influenced perceptions and attitudes, cost and access, and general health and safety concerns. Additional strategies to increase vaccine promotion identified included: collaborating with promotores, community-based organizations, and businesses to disseminate positive and culturally competent messaging; applying motivational interviewing; implementing vaccine mandates; providing medical referrals; and, incentivizing.

Conclusion: Behavioral factors have played a strong role and have further influenced the rollout and uptake of COVID-19 vaccines amongst Latinx in Chicago, IL. Furthermore, our findings indicate that trust, belief in conspiracy theories, and perceptions and attitudes serve as predictors of vaccine hesitancy in the Latinx community.

Policy Implications: Findings indicate the value that promotores have in educating the Latinx community about health preventive practices including testing and vaccination in a culturally sensitive and linguistically appropriate manner. Promotores need adequate training, resources, and timely education to support their community reach and address misinformation.



On-Fatal Opioid Overdose And Abuse Cases At The Upr "Dr. Federico Trilla" Hospital After Hurricane Maria, 2018-2021

Brigitte Baella-Olivieri: She/Hers

- BA
- University of Puerto Rico, School of Medicine
- *Co-authors:* Brigitte Baella-Olivieri, MS, Rodney George-Rivera, MD, Juan Gonzalez-Sanchez, MD, FACEP, Susan Corey-Best, PhD

Background: and Objectives: Opioid abuse (OA) and opioid overdose deaths (OOD) have risen steeply in the United States since 1999, but not equally in all regions. The continuing increase has been largely fueled by illicitly manufactured fentanyl. Non-fatal opioid overdoses (NFOO) strongly predict OOD deaths. We have shown that the UPR Hospital in Carolina experienced an increase in NFOO beginning in 2016, with a steep increase in 2017, the year Puerto Rico was disastrously impacted by Hurricane Maria. NFOO peaked immediately after the hurricane. The objective of this study was to test whether high levels of NFOO and OA represent a new normal or decline after the hurricane.

Methods: De-identified records of diagnostic codes assigned by physicians for January 2018 through June 2021 were analyzed using Excel methods.

Results: During this period, 143,943 Emergency Department (ED) cases were recorded. Of these cases, 230 were related to NFOO and 210 to OA; no OOD deaths were reported. The annual rates of NFOO cases per 100,000 ED patients fluctuated: The lowest rate was 112 in 2019; the highest was 275 in 2020. The rates of OA cases without overdose toxicity increased from 112 in 2018 to 276 in 2021. Opioid withdrawal rates increased from 28 in 2018 to 64.6 in 2021 (n=58). Males 20-59 y/o comprised 76.5% of total NFOO cases, with 24.3% in the 30-39 y/o cohort. The M:F ratio of total ED visits was 1:1.4, compared with 8.7:1 for NFOO and 6:1 for OA visits. The causative opioid was coded as heroin in 162 cases, other opioid (n=50), synthetic opioid (n=1), opium (n=9), and unspecified opioid (n=1), with no methadone cases.

Conclusions and Impact: The rates of NFOO and OA did not decline in the post-hurricane period. Further work is needed to identify the causes, which may include disaster-related trauma, illicitly manufactured fentanyl, and others. Identifying the causative elements can aid in organizing an interdisciplinary strategy aimed at effectively addressing the root cause and decreasing NFOO and OA in Puerto Rico.

Apuntando Alta: Increasing Cultural Competence And Self-Efficacy In Undergraduate Nursing Students Through A Cultural Submersion Experience.



Krystal Ball MSN/ED,
RN, CCRN-K
• Assistant Professor
• California State
University, Bakersfield



Janie Ashley MPH, RN, PHNA-BC
• Associate Professor
• California State University,
Bakersfield

Background: Undergraduate nursing students seldom can be part of study abroad opportunities due to their rigorous, structured curriculum. This project involved two international study experiences in Latinx countries for undergraduate nursing students. CSU Bakersfield is a Hispanic-serving institution. In 2022, 67 % of CSUB students identify as Hispanic, and 51% of the population in Kern County report Hispanic or Latinx origins. Healthcare professionals in our campus service area must have opportunities to increase cultural competence.

Objectives: To increase students' awareness of cultural variables, provide a unique clinical environment, and observe the consequences of health disparities and lack of healthcare access. The project goal is to increase self-efficacy, leading toward cultural competence. The cultural immersion experience for undergraduate nursing students aligns with several of the objectives of the Symposium, including identifying issues and barriers, pursuing equity through innovations in education, creating connectedness, and increasing Latinx individuals in healthcare and research.

Methods: This descriptive study utilized mixed methods to describe the influence of a study abroad experience on self-efficacy and cultural competence. A pre-post survey design was used to obtain quantitative data on students' perceptions of their own self-efficacy, confidence, and cultural competence. In addition, themes of learning and attitudes were explored using a qualitative thematic approach.

Results: Analysis for the Peru trip, in 2022, is complete; analysis for the second trip, in Costa Rica in June 2023, is pending but we expect completion by the MOLA conference date. Pre and post-survey responses are being analyzed using a two-sample t-test. The Peru trip analysis showed significant improvement in students' ability to distinguish between ethnicity and culture ($t = 0.78$; $p < 0.05$); inter and intracultural diversity ($t = 1.38$; $p < 0.01$); and ethnocentrism and discrimination ($t = 0.97$ $p < 0.05$). Students reported significant confidence in effectively utilizing interpreters ($t = 1.13$; $p < 0.05$). Reflective journals are being used to conduct qualitative analysis. Analysis from the Peru trip revealed increased confidence in adapting to new situations and understanding of how the lack of healthcare access and disparities affect health.

Conclusion: Cultural immersion experiences are innovative and can facilitate self-efficacy and cultural competence, especially for nurses, who play a vital role in healthcare. In our predominantly Hispanic area, having culturally competent nursing professionals will have a positive impact on healthcare services and perhaps improve disparities that are prevalent within Latinx or Hispanic populations.



Experiences of Mpox Virus Infections And Sequelae Among Gay, Bisexual, And Other Men Who Have Sex With Men In Nyc

Devin Barzallo

- Medical Student
- Case Western Reserve University School of Medicine
- *Co-authors:* Rachelle Monteau, Maximo Brito, Hong Van-Tieu, Jorge Soler

In NYC, the 2022 mpox outbreak disproportionately affected men who have sex with men (MSM), with most patients identifying as Hispanic/Latino (34.7%). Despite the Latino community being affected the most, only 24,576 Latino individuals received vaccines compared to 48,128 white patients, with only 47% of those Latino individuals completing the 2-dose series, compared to 54% of white individuals completing both series. We aim to elucidate the sequela of the 2022 mpox outbreak on MSM and see the role of the stigma that may have affected diagnostic, treatment, and prevention services for those at risk for mpox infections. We will conduct individual face-to-face interviews with 25 MSM with and without HIV who had mpox infection in the past year, to identify their exposure, clinical course, and barriers and facilitators to mpox vaccinations. Recruitment was done with community outreach and engagement, and online flyers on Craigslist, Instagram, and Grindr. We identified 49 MSM with mpox in the past year of which 57.1% are living with HIV and 36.73% (18/49) identified as Latino. We have interviewed 10 participants thus far of which 5 were living with HIV (50%), and 3 identified as Latino (30%). The median age was 33.5 (IQR: 28,38). All patients reported that there was a stigma associated with mpox, which resulted from how it was portrayed as only affecting MSM, especially those that were perceived as more promiscuous. Most patients had at least one negative experience with healthcare related to mpox, either due to lack of information, and some reported receiving no care or follow-up. This work is relevant for future messaging and programming to decrease stigma and negative sequela associated with mpox and other viral infections that affect MSM.

Teaching Street Medicine and Homeless Care Medicine - A Free Clinic Underserved Medicine Curriculum

Victor Becerra

- Lead Researcher
- University of California, Irvine
- *Co-authors:* Rhayne Lee, Hanh Huynh, Jared Lyons, MS, Laura Zavala, MD, Baotran N. Vo, MD

Background: Medicine has evolved from the mobile physician carrying his doctor's bag to making home visits to now large multi-storied institutions with ultra-subspecialized care. Medical training also has evolved and access to care is less frequently taught. As part of our commitment to underserved medicine, our residents rotate through the student-run free clinic on Saturday mornings to service the underserved. Our undergraduate, medical students and residents collaborate with the local Lestonnac free clinic to staff a mobile clinic to the site every Saturday morning. This experience provides learners with a different side of medicine with a focus on wound care, overuse injury, heat exhaustion, minor trauma, and providing care with limited resources.

Objectives:

- 1) List 3 common challenges for physicians staffing a homeless mobile free clinic
- 2) List 3 common diagnoses addressed at a homeless mobile free clinic
- 3) List 3 common concerns learners have working with homeless populations

Methods: using surveys collected by undergraduate volunteers, preceptors, and medical students as well as thematic analysis from a randomized sample of patient charts

Results: Results: at the time of the presentation will showcase student survey data on common concerns they had before volunteering at the free clinic and if their minds changed afterward. Also, we will present the list of medical diagnoses listed for the visits to the clinic. We will list challenges faced by the clinicians at the clinic and ways that we have tried to overcome such challenges. We will share common lecture topics selected by our learners as high yield including trauma-informed care and common first aid and wound care skills.

Impact: Family Medicine's scope of practice is wide. Part of the residency burden is to teach a wide range of skill sets that allow graduates to thrive in a variety of settings. Less often available in Residency training is street medicine due to the collaboration and infrastructures needed.



Exploring Barriers and Challenges Faced by Latinx International Medical Graduates in Academic Career Development and Research in the US: A Comprehensive Survey

Janeth Cristina Castano Jimenez MD, MHA: She/her/Hers

- Clinical Research Technician. Co-Chair International Health Graduate Committee (MOLA)
- Division of GI/Hepatology, Indiana University School of Medicine, Indianapolis, Indiana. Indiana University Health. West Lafayette, Indiana



Evelyn Frias-Toral, MD, MSEC, MHA: She/her/Hers

- Title/Position: Associate Professor Instituto de Investigación en Salud Integral (ISAIN)- Universidad Católica de Santiago de Guayaquil - Comité de Investigación de la Sección Ibero-latinoamericana de la Sociedad Americana de Nutrición Parenteral y Enteral (ILAS-ASPEN)
- *Co-Authors:* Maria F. Osorio: Universidad Espiritu Santo, Samborondon, Ecuador. Josselyn Velepucha-Iniguez, MD: Department of Health Sciences. Universidad Técnica Particular de Loja (UTPL), Loja, Ecuador. Bernardo Donery Lopez Samayoa, MD: Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland.

Background: International medical graduates (IMGs) are an important part of the US healthcare workforce, as they represent 26% of physicians in practice.

Studies have shown that many IMGs experience barriers like discrimination, language, limited work opportunities, knowledge of the health system, and financial loss, among others. Latinx IMGs may experience specific barriers and challenges that have not been reported previously when applying for a research position, which might affect their achievement of academic goals and/or entering a Medical Residency.

Objective: Describe the specific barriers and challenges Latinx IMGs experience in academic career development and research in the US.

Methods: Cross-sectional pilot study conducted by the Medical Organization for Latino Advancement - International Health Graduates (IHG) Committee from June - July 2023, that surveyed 67 IHGs from 12 countries. Demographic data and information related to 5 different categories (Mentorship and unrepresented Role Models, Collaboration and networking, Institutional Support, Funding and grants, and Cultural and social adjustment) were collected. Responses were obtained through a self-reported online survey in English and Spanish from the participants who gave informed consent. Data was analyzed using SPSS 25.

Results:

71.6% of the participants were female IMGs, 73.1% were non-US IMGs, and 88.1% were actively pursuing research or academic career opportunities in the US. 46.3% reported having no research background in the US, while 50.7% had previous research experience in their home country.

The barriers most commonly identified were: Mentorship and unrepresented Role Models (40%), Collaboration and networking (19%), Institutional Support (15%), Funding and grants (14%), and Cultural and Social Adjustment (12%).

Conclusions & Impact:

The lack of mentorship models tailored for IMGs emerged as a prominent barrier. Additionally, limited networking was identified as a significant challenge. Language barriers were not considered a major obstacle by most respondents, but emotional distress was a prevalent issue. By recognizing and addressing these barriers, academic institutions and healthcare organizations can create a more equitable and supportive environment for Latinx IMGs. This will enhance the career development and research opportunities for Latinx IMGs and contribute to improving healthcare outcomes for diverse patient populations.



Assessment of Food Insecurity among Patients with Inflammatory Bowel Disease in the University of Puerto Rico - IBD Clinics

Rafael Cummings López

- Medical Student
- University of Puerto Rico Medical Sciences Campus
- *Co-authors:* Lizzie M. Ramos-Tollinchi, MPH2 , Alondra Soto Gonzalez, BS2 , Valeria Castelblanco Agostini2, Esther Torres, MD 1,2

Background: Inflammatory bowel diseases (IBD) are immune-mediated gastrointestinal diseases including Crohn's disease and ulcerative colitis. Diet is a modifiable factor in their management; nonetheless, healthier diets require higher costs. A 2021 study concluded that 1/7 of IBD patients in the United States (US) do not have access to nutritionally adequate food or are food insecure. Food insecurity (FI) is defined as limited or uncertain access to sufficient food rations. Neither dietary patterns nor FI have been studied in Puerto Ricans with IBD. Assessing this social determinant will help determine if IBD patients can efficiently follow and benefit from a healthy, yet expensive diet.

Objectives:

1. Study the frequency of food insecurity (FI) among Puerto Ricans with inflammatory bowel diseases (IBD)
2. Investigate the relationship between food security status and demographic factors
3. Highlight the need for an appropriate and accessible diet for Puerto Ricans with IBD

Methods: A 19-question tool from the USDA's U.S. Household Food Security Survey Module was administered to participants. The questionnaire classifies participants as having high, marginal, low, or very low food security, the last two indicating FI. We analyzed IBD type, age, gender, government assistance benefit, and income. These were cross-tabulated against food security status, stratified as Food Secure (FS) vs. FI. Statistical significance between the groups was determined by a Fisher exact test.

Results: Of 57 subjects, 17.5% demonstrated FI. Very low food security was reported in 10.5% of cases. FS and FI groups showed no statistical difference in diagnosis, age, marital status, income, living area, and government assistance benefit. However, most food-insecure patients were females ($p = 0.013$). All subjects with an income greater than \$50,000 were food secure.

Conclusions: We found a slightly higher frequency of FI amongst our patients with IBD compared to the US (17.5% vs. 14%). FI disrupts eating patterns and reduces food intake, affecting adequate IBD management. Developing an appropriate and accessible diet for Puerto Ricans will minimize this disparity in the management of our patients with IBD.



Development of a Community-Based Intervention to Increase Screening for Alzheimer's Disease and Related Dementias in the Latinx Population

Rodrigo De La Torre

- Medical Student
- University of Wisconsin School of Medicine and Public Health
- *Co-authors:* Maria Mora Pinzon, MD

Background: Despite their higher prevalence of Alzheimer's disease and related dementias (ADRD), Latinx individuals have higher rates of under-diagnosis, and over half receive delayed or missed dementia diagnoses. Within the older Latinx community, limited English proficiency and economic status are associated with lower physician service utilization and have significantly delayed diagnosis and treatment of dementia. To bridge the gap between the healthcare system and the Latinx community, a community-based framework has been suggested as a practical approach to improve access to diagnosis and healthcare services.

Objective: The purpose of this study is to develop a community-based educational program about ADRD for Latinx individuals that is culturally appropriate increases awareness about ADRD and incentivizes participation in the screening and follow-up process.

Methods: We will work alongside community advisory groups to develop a conversational educational program in Spanish that can be delivered in community settings by non-healthcare professionals (e.g. community health workers). The program will include background information on ADRD, the importance of screening, and resources following a positive diagnosis. We will use evidence-based practices in health communication and pilot the intervention in cultural Latinx events around WI. During the pilot, participants will complete a pre-and post-intervention survey to assess changes in knowledge and motivations to pursue ADRD screening and attitudes toward the intervention.

Results: We anticipate that individuals who complete the pilot educational intervention by our team will experience an increase in knowledge and will be more likely to pursue screening. These results will be enhanced by establishing trust and assistance with resource navigation, yielding promise for this intervention.

Impact: A community-based ADRD education model can be cost-effective and less resource-intensive to reduce missed or late diagnoses of ADRD and improve the engagement of the Latinx community with healthcare services.

Mobile Migrant Health Team: Case Report of Pediatric Esophageal Stenosis in Crisis Migrant Population

Miguel del Busto: he/him/his

- Clinical Care Director
- University of Illinois Chicago College of Medicine
- *Co-authors:* Sara Izquierdo, Grace Ogunbile, Sara Cooper, Sarah Medina-Aguirre, Jenny Yu Wang, Dr. Evelyn Figueroa, Dr. Cailean McKay

Background: The Mobile Migrant Health Team (MMHT) is a volunteer organization that provides mobile health screenings and basic medical care in Chicago police stations for recently arrived refugees seeking temporary shelter. MMHT identified 12-year-old L.O. who had arrived from Venezuela with his father and siblings and presented with a modified Foley catheter in place of a gastrostomy tube. L.O. has a 10-year history of esophageal stenosis due to the accidental ingestion of caustic acid at age 2. L.O. also presents with stunted growth and malnutrition, given both cost-prohibitive and inconsistent access to enteral nutrition throughout his and his family's 7-month migration.

Objective: This case report discusses this patient's care plan, barriers to healthcare identified for recently arrived migrants, and the importance of patient advocacy in navigating the healthcare system.

Methods: The team facilitated transfer to a city-run shelter and connected him with a PCP and specialized care as well as transport and patient advocacy for these appointments. Post-corrosive esophagitis can be managed conservatively with frequent follow-up for endoscopic dilations, or in severe cases, with definitive surgical management.

Results: The improvised catheter was replaced with a new MIC gastrostomy feeding tube (MICGFT), but due to long-standing feeding concerns from housing insecurity and MICGFT complications, the patient was prioritized for definitive surgical intervention via esophageal resection and esophagogastric anastomosis. All care and recovery plans were organized through MMHT.

Conclusion/Impact: Surgical management barriers can be patient or system-related, and are especially notable in immigrant, under or uninsured populations. System-related barriers that MMHT noted and addressed were access to specialized care and access to clinic follow-up, while patient-related related were financial such as out-of-pocket cost and transportation. Here, we discuss addressing these barriers and strategies for facilitating care for L.O. and other newly arrived migrants.

Social Media handle: @mmhtchicag

Changing Roles: Promoting Cognitive Health in Hispanic Families through the Community Health Clubs Model

James Dipko

- MD/MPH Candidate
- Long School of Medicine - UT Health Science Center at San Antonio; UT Health Science Center at Houston School of Public Health
- *Co-author:* Dr. Jason Rosenfeld (DrPH, MPH; Project Mentor), Jose Gaspar de Alba (MD Candidate), Nicholas Baker (MD Candidate)

Background: Community Health Clubs (CHCs) were established in 2017 in the Lower Rio Grande Valley (LRGV) area as a sustainable model to improve health literacy and community engagement in the LRGV communities. Our target audience is middle-aged Hispanic women, most of whom are taking care of their children or their elderly parents. A needs assessment conducted by our team of trained promoters (community health workers) revealed club members' prioritization of learning how to be a better caregiver for family members with Alzheimer's, Dementia, ADHD, and Autism Spectrum Disorder. We designed a curriculum to promote cognitive health and enhance knowledge of neurocognitive deficits and disorders among the Hispanic communities in LRGV.

Objectives: The goal of the curriculum was to improve participants' ability to serve as caregivers of children/adults with neurocognitive conditions by expanding their understanding of neurocognitive deficits and disorders and the resources available to assist them.

Methods: 86 CHC members completed a 10-week curriculum that taught common neurocognitive deficits/disorders, caregiving for children and adults, available resources, and ways to mitigate burnout. Six promoters participated in a one-day, in-person training, which was supplemented by weekly meetings to review upcoming sessions and answer questions. Each club session was facilitated by one promotor and included activities that utilized participatory learning such as role play and teach-back. Weekly club meetings provide a safe space for experience sharing and collaborative discussions concerning the signs and symptoms of the various disorders along with caregiving strategies and resources. Evaluation was accomplished through a pre and post-curriculum survey and a post-curriculum focus group with a representative sample of members.

Results: Data is currently being analyzed. We expect to find significant improvements in participant understanding of common neurocognitive disorders and increased awareness of their prevalence. We expect to find themes of belonging and increased confidence in handling health challenges.

Conclusions: The CHC model is an effective strategy to reduce health knowledge gaps among the Hispanic population through culturally sensitive/relevant education. Doing so fosters confidence among group members and empowers them to employ their knowledge for the betterment of the community.



How do Medical School Experiences Differ between Students from Low- vs. High-Socioeconomic Status Backgrounds? A Multicenter U.S. Survey Study.

Andrea Gomez: she/her

- BA/Medical Student
- University of Chicago Pritzker School of Medicine
- *Co-authors:* Anastasia Pozdnyakova Piersa MD MBA, Sophie Son BA, Marco Rivas BS, Willa Li BA, Capri Alex BS, Jay Patel BS, Fatima Bouftas BS, James N. Woodruff MD, Katherine C. Chretien MD, Wei Wei Lee MD MPH, Maria A. Alkureishi MD

Background: Many medical schools prioritize student diversity by focusing on visible identities such as race and ethnicity, however, efforts to address more invisible yet important aspects of diversity, such as socioeconomic status (SES), have been more limited. 1,2 Low-SES clinicians from backgrounds similar to those of their patients can better relate, have more positive attitudes towards patient-centered care, and are more likely to work with underserved patient populations.3,4 Low-SES medical students experience persistent barriers getting into and completing medical school,5 but little is known about the drivers behind these disparities and the experiences of low-SES medical students.

Objective: To evaluate how medical student experiences differ between low- and higher-SES medical students.

Method: 14 U.S. medical schools were surveyed March-May 2021 using an 88-item questionnaire that included standardized survey tools. 6 Low-SES was defined as meeting one of the following three measures: AAMC Employment-Occupation SES-disadvantaged indicator, household childhood income in bottom 2-quintiles, and/or student self-classification.7-9 Standard descriptive statistics, Chi-squared tests, and multivariable generalized estimating equation models adjusting for confounding covariates. Analysis was done in R 3.6.1.

Results: Of 6,836 eligible students, 1,555 (22.7%) responded. Compared to their higher-SES peers, low-SES students were less confident about affording education ($p < 0.001$) and basic resources ($p < 0.001$). Additionally, low-SES students were more likely to report that financial strain negatively impacted their academic performance, less confident in their ability to relate to faculty, less connected to their medical school community, and were more likely to be burnt out and had higher loneliness scores. Hispanic/Latino students comprised 15% of low-SES students compared to 7% of high-SES students ($p < 0.001$), while White students comprised 59% of low-SES compared to 69% of high-SES students ($p < 0.001$).

Impact: This is the first multisite study to describe the impact of students' SES on their experiences at U.S. medical schools. Low-SES students are academically, financially, and socially disadvantaged as compared to their higher-SES peers. To close this gap and create a more equitable learning environment that supports a socioeconomically diverse student body, further work is needed to understand the unique challenges low-SES students face and reassess how schools can better support low-SES student.

Relationship between Medications for Mental Health Conditions and Digital Device Addiction in Children and Adolescents: A Study in the Rural California Population



Liliana Gonzalez-Cabral: She/ Her
 • MD.
 International Health Graduate
 • Sun Valley Research Center



Jose Alejandro Galan Cadena: He/ Him
 • International Health Graduate (IHG)
 • Sun Valley Research Center
 • *Co-authors:* Maria Alejandra Canas-Galvis MD. Santiago Álvarez Lesmes MD. Bernardo Ng MD

Background: The growing issue of digital device addiction (DDA) in children and adolescents (CAD) has prompted the exploration of various combinations of psychotherapy and psychiatric medications as potential treatments. However, establishing standardized treatments for DDA remains a challenge. Moreover, there is a dearth of research focusing on the response to these treatments among the Latino population in the US, who face unique social barriers.

Objective: Investigate the relationship between psychiatric medication usage and DDA in CAD in a rural California population.

Methods: This cross-sectional analytical study was conducted at a psychiatry clinic in rural California, where approximately 85.8% of the population is Hispanic. The study included 132 patients with primary diagnoses of depression (42.42%), anxiety (28.08%), ADHD (45.45%), autism, and bipolar disorder. Medications taken by participants were categorized as stimulants (46.21%), mood stabilizers (52.27%), and antipsychotics (11.36%). Assessment of DDA was conducted by employing the Digital Addiction Scale (DASCI). Data analysis involved using the SPSS Version 28, utilizing non-parametric Spearman's coefficient to examine correlations between scalar variables and the Kruskal-Wallis test to compare the DASCI scores across categorical variables.

Results: We conducted a study involving 132 patients, with an average age of 14 years. We found a significant negative correlation between DASCI and stimulant use [$p < 0.036$]. Age also emerged as a significant factor, with older participants showing lower DASCI scores [$p < 0.009$]. Notably, we found a strong negative correlation between DASCI and GPA [$p < 0.01$]. However, other medications, BMI, and exercise frequency did not demonstrate significant predictive value in our analysis.

Conclusions: Stimulant use in ADHD treatment demonstrated a negative correlation with DDA according to the DASCI scale, highlighting the need for further research on its effectiveness and as a potential treatment option. Additional investigation is required to ascertain whether its efficacy stems from managing ADHD symptoms or directly addressing DDA. Our findings emphasize the negative impact of DDA on CAD, as indicated by the negative correlation with GPA. Additionally, higher addiction levels among younger individuals underscore the importance of targeted interventions for this age group. Addressing access and social barriers to effective treatments is crucial for managing DDA among the Latino population.



Gender and Ethnic Disparities in Vision Care: Focus on Visual Impairment among Hispanic Women

Yazmin Alejandra Heredia Allegretti: she/her/ella.

- Medical Doctor. International Health Graduate (IHG)
- Universidad Autonoma de Yucatan, National Association of Medical Spanish, American Medical Women's Association
- *Co-authors:* Hui Ting Ruan, MD (Universidad Centro Occidental Lisandro Alvarado). Kiara Velez Sarabia, MD (Universidad Católica Santiago de Guayaquil)

Background: Hispanics are the second-largest group in the U.S., comprising 18.6% of the population. Hispanic women make up 18.1% of all women in the country. Cataract is the leading cause of visual impairment in the Hispanic community, accounting for 42% of all vision loss. Between 2010 and 2050, the Hispanic community is expected to experience the most significant increase in cataract prevalence, from 1.76 million to 9.51 million cases. Hispanic women receive different and unequal healthcare as compared to Hispanic men.

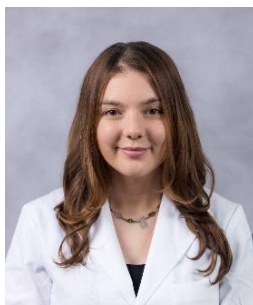
Objectives: Identify gender inequalities in Hispanic women's vision care, including cataract prevalence and treatment delays. Understand the effects of early diagnosis and treatment-seeking behavior on addressing these disparities.

Methods: Literature Review analyzing socio-demographic surveys, population-based studies, and relevant literature on cataracts and health indicators of Hispanic women living in the U.S.

Results: Cataracts have a prevalence of 14.23% in Hispanic women, while Hispanic men have a prevalence of 9.26%. Women in low- and middle-income countries have less awareness of eye diseases and less access to cataract surgery than men. In the U.S., gender roles rather than biological predispositions are the root of these disparities: Women are often the primary care providers for family members and may have difficulty seeking their healthcare. LALES found that being widowed was an independent risk indicator of visual impairment in this population. Additionally, 37% of Latinas lack health insurance and 58% lack coverage for vision care due to cost and insurance barriers. Language and financial barriers prevent Hispanics, in general, from accessing surgery.

Conclusion: Targeted interventions can address gender disparities in vision care. Efforts should be directed toward enhancing accessibility to cataract surgery and overcoming language barriers. The high surgery cost creates barriers for families seeking vision restoration, impeding equitable access. It is crucial to have screening programs for Hispanic women in the U.S. to eliminate gender disparity. By prioritizing these initiatives, we have the potential to reduce the prevalence of blindness, particularly among Hispanic women, and promote greater visual health equity in the population.

Mobile Migrant Health Team: A Healthcare Initiative Model in Chicago



Sara Izquierdo: she/her

- Mobile Migrant Health Team Director
- University of Illinois Chicago College of Medicine
- *Co-authors:* Miguel del Busto, David Dulce, Sarah Medina-Aguirre, Sarah "Sarita" Davis, Sara Cooper, Erick Masias, Jenny Yu Wang, Dr. Evelyn Figueroa, Dr. Cailean McKay



Miguel del Busto: he/him

- Care Coordination Director, Second-year medical student
- University of Illinois Chicago College of Medicine

Background: The Mobile Migrant Health Team (MMHT) is a specialized healthcare initiative aimed at providing medical services and support to migrant populations in Chicago. On May 9th, 2023, a state of emergency was declared in Chicago in response to an influx of migrants. MMHT has grown to become the largest network of medical student and physician volunteers within Chicago providing care to this patient population. MMHT provides twice weekly health assessments to migrants temporarily housed at police stations awaiting shelter placement.

Objective: MMHT works to provide unhoused migrant families with health screenings for medical needs and resources for further medical care or emergent treatment.

Methods: Our model: 1) Outreach and Healthcare Screenings: With a team of physicians and medical students, MMHT offers free healthcare assessments to identify concerns among migrants facing barriers to accessing traditional healthcare facilities. This includes general medical consultations, preventive care, and basic treatments for common ailments. 2) Referrals and Follow-up: When advanced medical care is required, MMHT facilitates referrals to appropriate providers. MMHT assists in coordinating appointments and ensuring follow-up care for complex health needs. 3) Health Advocacy: MMHT advocates for migrant populations by raising awareness about healthcare disparities and working to improve access to culturally sensitive and language-concordant care. MMHT collaborates with the City of Chicago Department of Public Health and community stakeholders to address systemic challenges. 4) Cultural Competency and Language Support: MMHT recognizes the importance of cultural competency in healthcare delivery. MMHT provides services in migrants' native languages, predominantly Spanish, via native speakers and interpreters ensuring effective communication.

Results: Since May 6, 2023, MMHT has screened over 3,500 patients and is the primary healthcare provider for various police precincts. The majority of patients arrived from Venezuela and other Latin American countries. The most common consultation is for symptomatic treatment of URI. Cases requiring escalation have included tuberculosis, varicella, thrombophilia, and scarlet fever.

Conclusions & Impact: MMHT has provided care to thousands of migrants while addressing a critical healthcare gap in this population. Challenges to our mission include limited funds and rapidly changing protocols. Please consider donating your time and resources to our organization.



Fostering a Culture of Mentorship is Associated with Increased Resilience Post-COVID-19

Zain Khawaja: He/Him

- Medical Student (MS-3)
- Case Western Reserve University

Humberto Baquerizo: He/Him

- Director of MentorU and Faculty at Rutgers New Jersey Medical School
- Rutgers New Jersey Medical School

Background: Resilience among youth is associated with better mental health outcomes and education status. There has been a growing body of literature surrounding youth mental health and resilience since the start of the COVID-19 pandemic, especially among the underrepresented populations. Understanding the pandemic's psychosocial impact on youth students and its relationship between mentorship, resilience, and well-being is necessary to develop appropriate community-centered programs to address the mental health needs of our youth. In doing so, this fosters positive and protective factors that promote well-being.

Objective: This study aims to measure resilience levels using the validated Rugged Resilience Measure (RRM) among high school students who participated in a longitudinal mentorship program, versus those who did not.

Methods: High school students participated in a formal, longitudinal mentorship program run by MentorU (a community non-profit based in Newark, New Jersey). High school students who did not receive formal mentorship served as the control group. Both groups received the RRM to determine resilience levels.

Results: Forty-three students participated in the study. Various racial/ethnic (72% Hispanic; 35% Black) and economic (57% economically disadvantaged) backgrounds were included. Students who received formal mentorship demonstrated higher levels of perseverance despite difficulties (42% vs. 29%), hope for the future (60% vs 38%), control of emotions (16% vs 8%), rising to the challenge (42% vs 21%), and finding meaning in life (47% vs 38%). Students in both groups reported similar levels of coping with competing demands, finding solutions to problems, being prideful in achievements, adapting to challenge solutions, and believing in themselves.

Conclusions: Cultivating a culture of connection through mentorship is associated with higher resilience in certain areas, including perseverance, hope, emotional control, rising to the challenge, and finding meaning in life. Greater focus should be placed on community-focused mentorship programming for America's youth to increase resilience levels to improve health and well-being.



Improving Health Equity of the Latinx Community of Metro Detroit through a Student-Run Clinic Initiative

Nevil Khurana: He/Him

- Medical Student & Coordinator, Amigos Medicos Free Clinic
- Wayne State University School of Medicine
- *Co-Authors:* John Gallagher, Deni Peterson, Rafael Ramos, Jose Lopez; Latino Medical Student Association (LMSA) and Amigos Medicos Free Clinic

Background: A review of the current literature demonstrates an inequity in healthcare among the Latinx population of Metro Detroit. Whereas 8.7% of Detroit residents experience a lack of health insurance, amongst the Hispanic community 22% lack insurance. Further known barriers to achieving health equity include language, transportation, difficulty finding services, and the high cost of medical copays. In July of 2023 the Amigos Medicos student-run free clinic of Wayne State University School of Medicine (WSUSOM) hosted a health fair in Southwest Detroit to begin bridging the gaps in care prevalent within this community.

Methods: We provided attendees an opportunity to fill out a 25-question survey regarding demographics, barriers to care, and general health characteristics. Specifically, it consisted of 5 questions regarding attendee demographics, 5 questions regarding attendee healthcare and medical history, 14 questions regarding barriers to care and general interests, and 1 open-ended question addressing further comments or suggestions. We received 23 survey submissions which were collected using an iPad.

Results: are presented as descriptive statistics.

Results: 18 respondents (72%) reported a lack of medical insurance, while 13 (67%) lacked a primary care physician. 7 (50%) expressed a prior inability to afford medication, while 7 (50%) did not express a prior inability to afford medication. 10 (67%) expressed difficulty buying food during the past 12 months, while 5 (33%) were food stable. 6 (40%) respondents stated they had heard of the Amigos Medicos Clinic. Flyers and friends/family (word of mouth) were the most common ways (4 respondents each) of hearing about the health fair. Of the conditions listed in the survey, diabetes (29.41%) and high blood pressure (29.41%) were the most highly reported by participants. 66.67% of survey participants reported not having a primary care physician for which to seek health services and 72.2% reported having no health insurance entirely. When asked what barriers to care the participants have experienced, lack of health insurance (28.57%), high cost of care (23.81%), language barriers (23.81%), and length of time before appointment (14.29%) were the most highly reported.

Conclusions & Impact: This initial survey supports our hypotheses regarding Latinx health characteristics and access to healthcare in Metro Detroit. Additionally, this survey illuminates previously unknown avenues through which we can provide better care to the community. The Latinx community is among the fastest-growing ethnic groups in the nation. Studies suggest that a more diverse, culturally competent physician workforce is needed to better treat this unique population. The Amigos Medicos Clinic provides an opportunity for medical students to engage with the Latinx community, develop their fluency in medical Spanish, and lay the groundwork to care for Latinx patients in their future practices across the United States.

Understanding the Role of Community Advisory Boards in the Hispanic Community

Gabriela Lombardo

- MS
- Wisconsin Alzheimer's Institute, University of Wisconsin – Madison, Madison, WI
- *Co-authors:* Gina Green-Harris; Diana De Oliveira-Gomes; Maria Elisa Vasquez; Maria Mora Pinzon

Background: Community Advisory Boards (CABs) are essential to address public health priorities, especially in underserved populations such as Hispanic communities. CAB's role is to reduce cultural and linguistic barriers, improve health outcomes, and provide community information to the institutions.

Objective: To summarize and understand the CAB's different roles and responsibilities to improve health prevention in Hispanic Communities and how they are used in the research setting.

Methods: We searched CINAHL and PubMed databases from 2010 through 2023. We included original studies that showed the use of CABs for Community-based participatory research (CBPR) and described their functioning with input from the CAB members. Industry/Expert Boards and clinical trial protocols or theory studies were excluded.

Results: We found 5071 studies, 3092 were screened, 169 full-text studies were assessed for eligibility, and 39 met the inclusion criteria, of which 7 involved Hispanic communities. The topics of the studies were: obesity prevention and control in underresourced populations; strategies to improve individual's self-management of diabetes; design of virtual educational content for nursing students to enhance patient health outcomes; substance use and HIV; women's pregnancy intention screening process; and Latino child farm-workers health. One study developed a statewide network to promote health research priorities in Michigan's culturally diverse and underserved communities. In the seven studies included, the CABs were based at a non-profit community-based organization and had between 9-36 members; these individuals were community leaders, residents, and health promoters, most of whom were Hispanic. Their role included identifying community needs, advising, and developing specific strategies to improve health outcomes; some CABs also participated in data collection. Most of the studies involved adult CABs—however, one involved a youth advisory board.

Conclusion: CABs have been shown to reduce health disparities in Hispanic communities, especially in underserved areas; they are crucial in understanding healthcare and language barriers and implementing effective health prevention plans for the population. More studies are needed to identify how to maximize CABs' role in promoting health in the Hispanic community.

Cancer Outcomes in Undocumented Immigrant Patients in the United States

Ernesto Luna Melendez

- B.S.
- Rush University Medical College
- *Co-author:* Ray Mendez, MD

Background: Recent census surveys suggest that there are about 45 million foreign-born immigrants living in the United States, composing 13.6% of the population. Over 11 million, or roughly one-quarter of these immigrants, are estimated to be undocumented. Despite their contributions to the economy, undocumented immigrants tend to have lower socioeconomic status (SES) backgrounds and the majority lack access to health insurance. Previous work has shown that patients from low SES and without health insurance have higher mortality rates and health disadvantages across a host of chronic conditions, including cancer. Patients without health insurance have worse short-term and long-term survival outcomes for all stages of varying cancers. Screening and early detection of cancers correlate with favorable prognoses; however, undocumented patients are significantly less likely to have a usual source of care and go without needed medical care for extended periods. Given the lack of insurance and barriers to care faced by undocumented immigrants, they are at risk for presenting with worse outcomes for all stages of cancer.

Objective: Cancer outcomes in the undocumented patient population have not been widely reported despite the additional barriers and adversities they face. To assess whether non-citizen, undocumented cancer patients have worse outcomes than citizens and the general uninsured patient population, we will use national cancer database registries to compare cancer screening utilization for the 5 most common cancers. We will also compare the initial stage at diagnosis for the 5 most common cancers and assess survival outcomes.

Method: Cancer screening utilization will be analyzed using the Center for Disease Control's National Health Interview Survey between the years 2010-2022. Stage at diagnosis and overall survival will be assessed using the NIH Surveillance, Epidemiology, and End Results: Program along with the ACS National Cancer Database for the years 2010-2022.

Results: Pending summer project outcomes.

Conclusion and Impact: Completion of our objectives and results from national databases would help us better understand the cancer burden and adverse outcomes faced by this vulnerable population. Given the significant population of undocumented immigrants living in the United States, we must quantify these disparities and outcomes.



Major Barriers to Organ Donation for Hispanic/Latinx Individuals: A Review of Culturally-Tailored Interventions

Daniela Maciel: She/ her/ hers

- Medical Student
- Rosalind Franklin University of Medicine and Science, The Maddog Strong Foundation

Background: Daily, 17 people die waiting for a life-saving organ transplant. With over 100,000 individuals on the organ waitlist, Hispanic patients make up a disproportionate amount. Hispanic patients occupied 20.9% of the organ transplant waitlist compared to 39.7% by their non-Hispanic White counterparts this year as of August 2023. Yet, only 18.5% of recipients were Hispanic, while 50.3% were non-Hispanic Whites. Objective:s: This project aimed to compile major barriers faced by the Hispanic population in the U.S.A. which impede the number of Hispanic organ donors and recipients. Additionally, by examining culturally targeted health interventions aimed at breaking down these barriers, a look at successful interventions can propose future programming.

Method: A comprehensive search was conducted for relevant English-language articles published within the last 10 years. Articles were selected based on relevance to identifying barriers to organ donation within the Hispanic population and culturally targeted health interventions. Barriers and impactful interventions were identified. The reference lists of the articles were also assessed for further follow-up on the topics presented.

Results: Searches yielded a total of 14 articles for review. 12 of the articles identified major barriers within the Hispanic population for receipt of organ donation; 2 were deemed not relevant. The various barriers suggested by the 12 articles were identified, with the most commonly identified being (denoted as 'barrier' [number of articles identifying respective barrier]): cultural differences [8]; knowledge gaps [6]; medical mistrust [5]; concerns regarding bodily integrity [5]; religious beliefs [5]. Interventions such as the Northwestern Medicine Hispanic Transplant Program successfully implemented linguistically and culturally tailored programs with their Hispanic-identifying patients. This lead to 91% increase in Hispanic patient additions to transplant waitlist and a 4% increase in living kidney donations performed on Hispanic patients over six years.

Conclusions & Impact: This work provides a comprehensive view of previously identified major barriers to organ donation within the Hispanic community. There is still a strong lack of evidence-based implementation of culturally targeted interventions. Implementation of culturally and linguistically tailored interventions can serve to break down the current barriers faced by the Hispanic population, gradually increasing donor registration and organ recipients background.

Beliefs, Practices, And Attitudes About Health Care Accessibility, Health-Promoting Behaviors, And Diabetes Prevention In The Latino Community In Columbus, Oh

Carolina Romero: She/Her

- Student researcher/ Undergraduate student
- Denison University

Background: Due to the current health system in the United States, health disparities are worsened due to the lack of a nationwide healthcare system. These health disparities often affect minority groups, such as the Latino population. The reasons are as follows, the majority of Latinos are undocumented, not fluent English speakers, or lack knowledge of health services. This affects their health by prolonging treatment, late diagnosis, and many more secondary effects.

Objective: With this study, we will suggest new ways to improve the health of the Latino community not only in Columbus, Ohio but in other states. We will work alongside the local public health department to create campaigns geared to inform the Latino community. By doing so, better health habits will be promoted to Latino individuals.

Methods: As the Latino population grows, we decided to hear the beliefs, and habits, and understand the health practices Latinos are conducting in the Columbus area of Ohio. Following a mixed method approach we conducted both focus groups (6 total) and surveys (65 total) to collect data. Data collection took place between May 2023 and July 2023. To be eligible to participate, participants had to identify as Latino, of age 18 or older, and live in Columbus, OH. Data for focus groups were recorded using an iPhone 13 iOS 16.5.1, researchers transcribed the data manually. Survey collection was done by collecting answers in a Google Forms document. Participant recruitment occurred in both Spanish and English following the snowballing effect and word of mouth.

Results: As of July 17, 2023, we are pending summer project outcomes.

Conclusion & Impacts: The expected impact of this project is to identify the main barriers that contribute to the health disparities experienced by Latinos. These barriers and some possible solutions will be analyzed alongside the public department to create resources and campaigns that will better suit the Latino population to make them more accessible.

Although it was challenging to collect data due to the nature of the topic, being bilingual and Latino conducting the research was of great benefit; it established a certain level of trust by being a research by-latino-for-latino.

Moving Toward Equitable Data Collection for the Hispanic/Latino Population in the Census and Health Surveillance Systems

Ishmael Mendoza

- Student
- UIC

Objective: This project systematically reviews data-inequity for the Hispanic/Latino population, with a primary focus on the attribute of ethnicity.

Background: This review highlights the discussion of disaggregating data, reviewing the findings of research that has addressed health in Hispanic/Latino subgroups rather than the monolithic standard set by the Office of Management and Budget's 1997 Statistical Policy Directive No.15: "Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity." The research supports the use of ethnically disaggregated data for Hispanics/Latinos in making data more equitable, illustrating health disparities otherwise unaddressed. In addition, mistrust presents a unique barrier to creating a more equitable characterization of the Hispanic/Latino population in data.

Methods: The mistrust of data collecting institutions in the Hispanic/Latino is addressed by viewing the sentiments surrounding the 2020 Census, accompanied by a document analysis of public comments focused on the Hispanic/Latino racial/ethnic identifier in the Census.

Results: Policy recommendations derived from this review include: (a) supporting the adoption of disaggregated race/ethnicity standards in the Census through the open commentary; (b) supporting outreach to rebuild trust with Hispanic/Latino communities; (c) and training systems and researchers to collect disaggregated data ethically, maintaining the safety of participants.

Conclusion: These recommendations work toward a better understanding of health disparities, allowing for the creation of strategies with more cultural approaches. This will also allow more effective resource distribution at Federal and State levels with increased participation from these historically hard-to-count populations.

Analyzing the Use of Preoperative Telehealth Consults for Resource-Limited Communities Receiving Surgical Care in the Dominican Republic

Ruben Mercado Santos

- Medical Student
- Rush University Medical Center - Rush Medical College, University of Illinois College of Medicine
- *Co-author:* Michael Choi, Sara Izquierdo, MPH, Stephanie C. Crane, MD

Background: Although access to primary healthcare services is increasing in Peralta and other rural areas of the Dominican Republic (DR), access to specialty and subspecialty care remains limited by numerous factors including cost, distance, availability, and opportunity for follow-up. The emergence of telehealth as a gateway to higher levels of care offers a sustainable and cost-effective means of bypassing these obstacles. Previously, our team implemented a preoperative telehealth consult model to pre-screen patients in Peralta and other DR communities receiving surgical care from physicians at Rush University Medical Center (RUMC) in Chicago, Illinois.

Objective: This study will analyze this telehealth model to explore telehealth services as a means of addressing health needs and limitations to specialty care for resource-limited communities in the DR. **Methods:** Specialist physicians from RUMC were recruited to consult virtually with patients to pre-screen them for upcoming DR surgical service trips. Surgical specialties include ENT, orthopedics, plastic surgery, OB-GYN, and urology. Following the completion of surgical trips, the impact of the telehealth model will be assessed by analyzing the usability of telehealth technology and comparing the outcomes of pre-screened and non-pre-screened patients.

Results: This study will assess the impact of this model over one year and results are pending final data collection. **Conclusions/Impact:** In retrospect, this study will assess the impact of an implemented telehealth program for patients receiving surgical care in the DR. This program is expected to improve the efficacy and efficiency of surgical service trips in the DR. Pre-screening patients virtually should immensely benefit both patients and providers as patients are spared unnecessary and/or extraneous expenses of time and travel, especially if they would not benefit from these service trips, while physicians can pre-order tests or prepare special equipment for specific cases. We hope that our results will show that preoperative telehealth consults can improve patient experience and outcomes during surgical trips. This will serve as a basis for use of this or similar telehealth models for surgical trips in resource-limited communities throughout the world.

Incidence and Risk Factors of Omicron Variant SARS-CoV-2 Breakthrough Infection among Vaccinated and Boosted Individuals

Fabiola Moreno Echevarria

- Student
- Northwestern University
- *Co-authors:* Mathew T. Caputo, Daniel M. Camp, Susheel Reddy, Chad J. Achenbach

Background: SARS-CoV-2 vaccines are safe and effective against infection and severe COVID-19 disease worldwide. Certain comorbid conditions cause immune dysfunction and may reduce immune response to vaccination. In contrast, those with comorbidities may practice infection prevention strategies such as masking, social distancing, and receipt of monoclonal antibodies. Thus, the real-world clinical impact of immune-altering co-morbidities on SARS-CoV-2 infection in the recent post-vaccination period is not well established.

Objective: We performed this study to assess the epidemiology of Omicron breakthrough infection by type and number of comorbidities. We aim to evaluate how patient demographics (race, age, ethnicity) influence breakthrough infections and study the effects of booster timing and type on the hazard of breakthrough infections.

Methods: We will perform a clinical cohort study utilizing the Northwestern Medicine (NM) Enterprise Data Warehouse (EDW). Our study population was identified as fully vaccinated and boosted adults as per CDC/FDA vaccine guidance for COVID-19. The primary risk factor of interest was the number, and type of comorbidity as determined by ICD10 coding. Our primary outcome is time to incident SARS-CoV-2 infection as the first positive molecular test after Jan 1, 2022 (Omicron predominant variant). We will perform multivariable analyses using Cox modeling to determine the hazard of infection with the following covariates: comorbidities (distinct models for number of co-morbidities and co-morbidity by type), age, sex, race, ethnicity, and time since receiving booster dose.

Results: Summer project, results pending

Conclusion: Our findings will be able to reflect real-world differences in immunity and exposure risk behaviors for populations vulnerable to COVID-19.

Promoting Diversity for Future Clinician Scientists: A URM Mentorship Initiative

Steven Munoz

- Medical Student
- Rutgers New Jersey Medical School

Humberto, Baquerizo, EdD, MBA

- Program Development Specialist in the Office of Diversity and Community Engagement
- *Co-author:* Lauren Sherman, Pranela Rameshwar

Background: The underrepresentation of racial and ethnic minorities in the healthcare workforce is a persistent issue. This study aims to address this gap by exploring the impact of mentorship of underrepresented minorities (URM) and disadvantaged students in healthcare. The study investigates the role of mentorship in fostering diversity, improving educational experiences, and promoting scientific research among URM/Disadvantaged students. Mentorship is crucial for career success and advancement in the medical and scientific fields. Closing the gap between the relative amount of racial and ethnic minorities in medicine or research (only 6% of practicing physicians are Hispanic/Latino) in comparison to the general population, is paramount to developing our culturally competent healthcare workforce. The underrepresentation of URM faculty in academic medicine creates a continuous cycle, with a lack of mentors who can guide students. Together, both mentorship and social capital contribute to personal and professional development.

Methods: This study focuses on the Multidisciplinary Summer Research Education Program for Health Professional Trainees (R25) at Rutgers New Jersey Medical School. 19 URM students (50 % self-identified as Hispanic/Latino) from various Rutgers health professional schools participated in the program which included mentorship and coaching sessions, research experiences, and educational activities. A survey consisting of 52 questions was used to evaluate various domains, including psych-emotional support, professional development, and mentorship.

Results: Results: demonstrated a positive impact of the mentorship and leadership programs. 100% of the students felt that they gained insight towards a path to an academic/research career, and all felt that they understood the role and value of a clinician scientist. 100% of respondents understood the clinician-scientist role and valued the importance of mentorship. Students deemed mentors as accessible, supportive, and instrumental in instilling confidence. Nearly 80% of participants reported satisfaction and felt motivated by their mentors.

Conclusion and Impact: The findings highlight the importance of mentorship in enhancing social capital, fostering professional development, and addressing the underrepresentation of URM in academic and clinical research. The study underscores the need for continued efforts to promote mentorship programs that support URM students and contribute to a more inclusive healthcare workforce.



Health disparities and risk factors related to COVID-19 Infection among the Hispanic/Latino population in Louisiana

Carolina Odette Ochoa: she/her/ella

- Medical Student
- LSU Health Shreveport
- *Co-Authors:* Jillian L. Sandoz, Jennifer A. DeLeon, Martha P. Pearson, Corey D. Smith; Deborah G. Smith BSN, MPH, PhD

Background: Louisiana's Hispanic/Latinx population is a diverse community that has experienced significant growth in recent years. Unfortunately, COVID-19 has disproportionately impacted racial and ethnic minority groups, including Hispanics/Latinx, who often face disparities in healthcare access and outcomes.

Objective: This study aims to investigate the risk factors and potential disparities of COVID-19 infection among the Hispanic/Latinx community in Northwest Louisiana.

Methods: A cross-sectional study was conducted between June 2022 and March 2023, with data collected from 242 participants through an anonymous online survey available in Spanish, Portuguese, and English. Descriptive statistics were utilized to summarize and compare the characteristics of the overall sample, while Pearson's Chi-squared tests were used to identify statistically significant risk factors ($p < 0.05$).

Results: The average age of the participants was 42.2 years, 64.7% were female, 56.6% were born in Mexico, 37.7% had attained high school education, 54.1% did not speak English, 61.3% were married, and 51.1% were below the poverty level. Approximately 80% of the study participants had access to COVID-19 testing, with 44.3% receiving testing in a clinical or hospital setting. Among the study participants, 53.6% had been infected with COVID-19. Over half (50.4%) of those infected did not receive medical care. Additionally, 63.9% knew someone who had suffered severe illness due to COVID-19, and 68% expressed concern about contracting the virus. Significant risk factors associated with an increased likelihood of COVID-19 infection included female gender (< 0.001), limited English proficiency (0.002), living with three or more people (0.014), being born in Central America (0.044), obesity (0.008), and asthma (0.050).

Conclusion: In conclusion, our research highlights the importance of preventing the spread of COVID-19 and other infectious diseases among minority groups, especially Hispanics/Latinx. This can be achieved by allocating resources, implementing targeted interventions, and investing in research to understand further health issues and outcomes within this population in the United States.

Factors influencing eye screening adherence among Latinx patients with diabetes: a qualitative study

Christian Pelayo

- Student
- University of Wisconsin School of Medicine and Public Health
- *Co-authors:* Mora Pinzón, Maria, Lock, Loren J., Fowlkes, Christiana, Stevens, Chloe L., Hoang, Johnson, Garcia, Juan L., Jacobson, Nora A., Channa, Roomasa, Liu, Yao

Background: Latinx populations have the highest rates of visual impairment and blindness of any ethnic group in the U.S., with most cases of diabetic retinopathy remaining undiagnosed. We aimed to identify factors influencing adherence to diabetic eye screening in Latinx communities.

Methods: We conducted semi-structured individual interviews with adult Latinx patients in Dane County, WI. Interviews were transcribed verbatim, translated from Spanish to English, and analyzed using QSR NVivo software. We performed both inductive open coding and deductive coding using the National Institute on Minority Health and Health Disparities (NIMHD) Research Framework, as well as the Campbell and Egged Model.

Results: All participants (n=20) self-identified as Latinx and were diagnosed with type 2 diabetes. The mean age was 61.5 years (range:33-79 years). Most participants were uninsured (60%), self-reported low or moderate health literacy (60%), and preferred to speak Spanish during their clinic appointments (75%). Individual-level barriers to diabetic eye screening included limited eye health literacy, lack of insurance coverage, and low self-efficacy with diabetes management. Health system-level facilitators included a recommendation to obtain eye screening from a primary care provider and the use of non-written forms of patient education. Community-level barriers included social isolation, concerns about inconveniencing others, machismo, and immigration status.

Conclusions: We identified several health system and community level factors, in addition to individual factors, influencing adherence to diabetic eye screening in Latinx communities.

Impact: Given the heterogeneity of the Latinx community (e.g. country of origin, literacy, acculturation, socioeconomic status), addressing health system- and environmental-level factors may be especially important for creating interventions generalizable across diverse Latinx populations to advance health equity. This approach, known as "structural competency," seeks to develop interventions that address cultural factors while also addressing structural socioeconomic and environmental influences. Strategies addressing these factors may enhance the effectiveness of interventions to prevent blindness from diabetes and contribute to advancing health equity in Latinx communities



Quality Improvement Needs Assessment in Free Clinics: Evaluation of Student-Run Free Clinic's (SRFC) Follow-Up Mental Health Care Post-PHQ-2 or PHQ-9 Administration in Primary Care Appointments

Isabella (Isa) Perez Pecchio: she/her/ella

- MD Candidate Class of 2026, MOLA MRF-Scholar
- University of Illinois College of Medicine – Chicago
- *Co-author:* Joseph J. Cooper, MD

Background: From 2005-2020, the prevalence of the U.S. population with a major depression diagnosis increased from 6.6% to 9.2%, with only 66% of adults with a diagnosis receiving treatment. As urgent as this public health concern is for the nation at large, uninsured patients specifically face increased barriers to receiving equitable mental health care, worsening their health outcomes compared to patients with medical insurance. SRFCs, like the one led by UIC medical students at CommunityHealth, provide medical care to uninsured or underinsured patients. Still, little is known about the follow-up psychiatric care for patients who present with moderate to severe depression on the questionnaire results.

Objective: This study aims to conduct a needs-assessment evaluation of the follow-up mental health care provided to patients seen at CommunityHealth through UIC's student-run free clinics (SRFC) following their depression screening and evaluation.

Methods: A retrospective chart review of patients seen at CommunityHealth through UIC's primary care SRFC from 09/2020-08/2021 was conducted. Quantitative and qualitative data analysis will be utilized.

Results: 95 patient charts were reviewed within the allotted timeframe of all 30 SRFC primary care clinics weeks. Of these patient visits, 59% listed Spanish as a preferred language and requested the use of an interpreter, 24% listed Polish and interpreter use, while 15% had English as a preferred language with no interpreter request. 44.2% of the visits reviewed included administration of the PHQ-2/9 on the day of the appointment. From this sample size, a total of 4 patients had a positive PHQ-9 result, with a range of scores from 9 to 24 (positive screening here indicates a score ≥ 9). Qualitative thematic analysis of the patient chart notes was then utilized to determine common themes among patient visits.

Impact Statement: By evaluating the current process of providing follow-up care, we can determine the mental health service needs of patients seen at the free clinic and ultimately create an action plan to improve patient outcomes.

The Alianza Washtenaw Project - Evolving Strategies for Improving Health and Social Services Access for Latinx Residents in Michigan



Grecia Quiroga:
she/her/ella
● MD/MPH student
● University of Michigan Medical School; University of Michigan School of Public Health; Washtenaw Health Project; Washtenaw

County Health Department



Angélica Garcia: she/her/ella
● Outreach Coordinator/ Alianza Washtenaw Project Coordinator
● MPH
● Washtenaw Health Project, Washtenaw Health Department, Washtenaw County

Background: Latinx residents in Washtenaw County are twice as likely to be uninsured than their white counterparts. This leads to challenges accessing health and social services which are then compounded by cultural and linguistic barriers that Latinxs report they face when navigating an uncoordinated social services system in Washtenaw County.

Objective: In response to foundational research documenting barriers Latinxs in Washtenaw County encounter when facing crises, the Alianza Washtenaw Project coalition was formed within the Washtenaw Health Project division of the county's health department. Alianza Washtenaw's objective is to improve the delivery of health and social services by creating a collaborative county network of non-profit agency leaders to develop a coordinated referral system among its agencies and advocate for widespread access to bilingual or interpreter services for Latinx clients as a standard.

Method: During the Summer of 2023, qualitative interviews among coalition members were conducted to assess the barriers they face in assisting their Latinx clients and to gather potential solutions to address those barriers as a coalition. A bilingual, resource-sharing social media platform for Latinx residents was also established given the lack of and need for Spanish-language media in Washtenaw County. Further, an "Advocacy 101" workshop was delivered in partnership with a coalition member organization to enhance the advocacy skills of coalition members in support of the Latinx community.

Results: We interviewed 13 of the 24 coalition members which represent a total of 10 different non-profit organizations. Barriers agencies reported they face when assisting their Latinx clients are trouble identifying resources for housing, transportation, and food access. The themes that emerged for solutions to improve these barriers were creating an accessible central hub of information for the Latinx community, working with language access coalitions in the county, and creating an inter-agency referral tool.

Conclusions & Impact: There is a strong desire for continued collaboration among non-profit groups in Washtenaw County and unleveraged resources that could have profound positive impacts. The Alianza Washtenaw project will continue to build relationships with stakeholders and community members, advocate for bilingual services, build a coordinated referral system, and further develop resource-sharing hubs for the Latinx community.

Violence Against Healthcare Workers in Latin America and the Caribbean Region: A Subgroup Analysis from the Global ViSHWaS Study

Salem Ramirez

- Medical Doctor
- Latin America School of Medicine Havana, Cuba
- *Co-authors:* Hans Mautong, Kelly Meza, Genesis Camacho-Leon, Ivan Huespe, Nimsi Barrios, Keidy Zamora, Oyindamola Obadare, Reshon Hadmon, Hedys Selene Ordonez Mogollon, Daniella Myriam Pierre, Leydi del Pilar Lema Lema, Jorge Salluh, Lisdamys Morera Gonzalez, Marco Antonio Herrera Del Villar, Franz Lopez, Anasonye Emmanuel, Umme Faisal, Tanya Amal, Aisha Khalid, Akshat Banga, Rahul Kashyap, Gaurang Bhatt

Background: Healthcare workers (HCWs) globally may have been subjected to workplace violence (WPV) frequently. It has been recognized as a priority by the World Health Organization. Latin America and the Caribbean regions have witnessed a rising trend in violence against HCWs, however, detailed research into its aspects is still lacking. We report the results from a global ViSHWaS survey, gathered from doctors and medical students in the region.

Objective: To identify the causes, and perpetrators of violence against HCWs in the Latin American and the Caribbean region; and, to identify the effect of WPV on them in these regions.

Methods: A survey tool was developed based on the existing literature after internal and external validation. The REDcap-based survey was shared systematically using different social media platforms with HCWs worldwide including the Latin American and the Caribbean regions.

Results: A total of 788 responses were analyzed with a majority of them being females at 58%. The respondents were primarily from a public healthcare setting at 74%. A total of 64% were physicians while 36% were medical students. About 62% of participants experienced violence at their workplace. Verbal violence was reported to be the most common (62%), followed by emotional abuse (41%) and physical violence (15%). Supervisors and patient/family members were both reported as the most common perpetrators at 27% each. The most significant predisposing factor for violence was altered mentation of the patient (31%), followed by lack of security measures (14%), lack of patient/family education (9%), and overworked HCWs (9%). As a result of violence, 63% felt less motivated in their profession, and 7% considered quitting their workplace. Surprisingly, 71% of participants were not aware of the OSH guidelines, and just 14% were trained to manage a violent situation. Finally, 38% believed that the cases of violence at their workplace have increased during the COVID-19 pandemic.

Conclusions/Impact: Nearly two-thirds of HCWs in Latin America and the Caribbean region have been affected by workplace violence, which is comparable to the global data. Patient-related factors contributed most to the incidents of WPV. The COVID-19 pandemic has increased these instances.



A Community Led Reproductive Psychiatry Education Intervention for Promotoras

Margarita Ramirez Silva: She/Ella

- MD Student
- Stanford School of Medicine
- Co-Authors: Nataly Beck, MD; Ripal Shah, MD; Ana Paula Carvalho do Amaral, MD; Victoria Avila; Erica Villa; Laura Diaz; Maria Gallardo.
- Twitter Handle: @Futura_DraMargs

Background: Reproductive psychiatry is a relatively new and often overlooked field of psychiatry encompassing a plethora of disorders that predominantly affect women and individuals assigned female at birth (AFAB)¹. The Latinx community has been historically underrepresented in research and interventions targeting any psychiatric disorders due to limited access to healthcare and deeply entrenched belief systems, among other barriers. Therefore, novel methods are needed to reach this population. Thus, this project proposes the use of community health workers (CHWs), also known as promotoras, as agents for spreading awareness and knowledge about key reproductive psychiatric disorders.

Objective: The study aims to assess the effectiveness of a promotor-led intervention in increasing awareness and understanding of three prevalent reproductive psychiatric disorders: Premenstrual Dysphoric Disorder, Peripartum Depression, and Perimenopausal Depression. Specific aims include the co-creation and administration of training modules for CHWs on these disorders and evaluating the efficacy of these modules in enhancing CHWs' understanding of these conditions.

Method: Training sessions and materials will be co-created with a community advisory board (CAB) comprising CHWs and leaders from community organizations serving a predominantly Latinx population in East Palo Alto, CA, and San Jose, CA. Moreover, the sessions will be delivered by a medical student with experience working as a CHW and doing reproductive psychiatry research. To assess the effectiveness of these training modules, twelve multiple-choice pre- and post-tests will be administered to measure changes in CHW comprehension of common reproductive psychiatric disorders.

Results: Pending summer project outcomes.

Conclusions/Impact: This innovative approach aims to bridge the gap between conventional psychiatric practices and culturally congruent methods, enabling more effective knowledge dissemination within the Latinx community in the South Bay area. Expected outcomes include targeted strategies to raise awareness and promote treatment-seeking behavior. Furthermore, the project's evaluation method will offer insights into CHW-led intervention efficacy, laying the groundwork for potential replication in other cultural contexts. Ultimately, this research can contribute to the growing body of evidence supporting the importance of culturally sensitive approaches in mental health care, which is critical to reducing disparities in access and outcomes.

Factors associated with in-hospital complications and mortality among patients admitted with COVID-19 in a community hospital in Puerto Rico, 2020-2022

Haydee Rincon

- Investigator
- University of Puerto Rico School of Medicine, MD Class of 2024
- *Co-authors:* Juan A Gonzalez Sanchez MD. Endowed Health Services Research Center, Enid J. Garcia Rivera, MD, MPH, University of Puerto Rico School of Medicine.

Limari Archuleta Brignoni, BS.

- Investigator
- UPR Emergency Medicine Department

Background & Objective: Describe the socio-demographic characteristics, comorbidities, clinical management, and outcomes of patients hospitalized with COVID-19 in a community hospital in Puerto Rico to understand the factors associated with unfavorable outcomes to increase local knowledge and preparation to ensure adequate medical care for future events.

Methods: A retrospective cohort study of all patients with COVID-19 who were admitted to a community hospital in Puerto Rico between March 1, 2020, and August 20, 2021. Data was obtained from the clinical-administrative COVID-19 database of hospitalized patients. Sociodemographic and clinical data were collected as well as COVID-related variables and clinical outcomes during hospitalization. A descriptive analysis was performed using frequency and percent for categorical variables and standard deviation or medians and interquartile range for continuous variables. Chi-square or Fischer's exact test was used to compare categorical variables between groups, whereas continuous variables were assessed via the two-tailed Student's t-test or Mann-Whitney test.

Results: A total of 386 COVID-19-positive patients were admitted during the study period. The mean age of patients was 59.9 years (interquartile range 58-61.8, range 15-100). More males were admitted than females (males 53.4%, n=206; females 46.6%, n=180). The most common comorbidities were hypertension (219; 63.5%), diabetes (157; 45.5%), and asthma (42; 15.0%). Mean BMI was 31.3 (range: 14.6-68.6). Out of the 346 patients needing oxygen supplementation, 50% required nasal cannula and 15% required ET intubation. Overall, 272 patients (70.5%) were discharged home alive, and 90 (23.3%) died. A minority of patients were vaccinated (25, 13%). The mean length of stay was 8.9 days (n = 372) with no difference by sex. Death was the same within sexes but increased in patients older than 50 years. Death risk was increased in patients with hypertension (30.1%, p-value 0.002) and CAD (44.4%, p-value 0.004).

Conclusion and Impact: Our study demonstrated the prevalence of certain socio-demographic and health characteristics in the Puerto Rican population and their effect on treatment and outcomes during the pandemic. The identification of social and health determinants will aid in providing appropriate health care and reduce morbidity and mortality in future emergencies.

Digital Health Software Engagement by Latinas in Scheduling Mammograms and Pap Tests at a Federally Qualified Health Center in South Seattle: A QI Project

Alejandra Silva Hernandez

- First Year Medical Student
- University of Washington School of Medicine

Background: Little research exists on the uptake of digital health platforms by Latinos. This study aimed to improve mammogram and Pap test scheduling methods used by a federally qualified health center serving a large Latine and Spanish-speaking population.

Objective: This project aims to improve mammogram and Pap test scheduling among Latine patients at a federally qualified health center in South Seattle.

Method: Patients enrolled in the Breast, Cervical, and Colon Health Program (BCCHP) at the Sea Mar Burien Medical Clinic were surveyed on their use of HealthTalk AI software to schedule their mammograms and pap tests. The inclusion criteria involved Latina patients who were due for their mammogram and/or pap tests in September 2022 and March 2023.

Results: The extracted data will be consolidated qualitatively to provide a perspective on the use of software among Latines to schedule future mammograms and pap tests. The collective perspective will be used to advise Sea Mar Burien Medical Clinic on the effectiveness of HealthTalk AI as a scheduling tool. Pending summer project outcomes.

Conclusion and Impact: This quality improvement project will contribute to the existing body of literature by evaluating the effectiveness of software to schedule appointments among Latine patients at a federally qualified health center in South Seattle. The findings will provide valuable insights for healthcare professionals, researchers, and individuals interested in incorporating digital health technologies into their healthcare practices. The implications of this research may guide the development of methods to improve scheduling practices that provide equitable healthcare access to the Latine population.

Opioid-free anesthesia and analgesic quality during the postoperative period of oncological breast surgery in Sanatorium Allende.



Dr. Rodrigo Parada Heit:

He/Him

- Medico Anestesiologo
- Sanatorio Allende, Federación Argentina de Anestesiología, Analgesia y Reanimación.



Marianne Solano Molinaro

- Medico Cirujano
- Universidad de Carabobo

• *Co-authors:* Stephany Souto Sivira, Juan Felipe Jimenez

Background: Anesthetic protocols for surgical treatment and pain management are mostly based on opioids which can cause complications that severely affect patients' lives, including but not limited to Opioid use disorder (OUD). Overuse of pain relievers after surgical interventions is a major pathway to opioid misuse in Latinos. Opioid-free techniques have shown optimal anesthetic-analgesic management and reduced complications. The objective of this research is to compare both approaches and evaluate their impact on the Latina women population undergoing oncological breast surgery.

Methods: Simple, prospective, randomized, controlled blind clinical trial with 30 patients undergoing oncological mammary quadrantectomy. Patients were divided into two groups. Group A received balanced general anesthesia with opioids as analgesic strategy and Group B received opioid-free balanced general anesthesia supplemented with PECs II regional block and/or Serratus (BRILMA), ketamine-lidocaine as adjuvant drugs. Analgesia was assessed using the numerical pain scale at 2, 4, and 6 hours. A Brief Pain Inventory was used to measure the severity and impact of pain on daily performance. Postoperative complications, length of stay in hours, and need for rescue with opioids were evaluated.

Results: Pain levels measured in group A were higher at all times than those found in group B with a statistically significant difference. 35% of patients in group A required analgesic rescue with Tramadol, while in group B only 10% needed it. 33% of the patients in group A presented nausea and vomiting, while in the opioid-free group only 1%. From surgery to discharge, group A was hospitalized for 25 hours (SD=21.2), while group B was only 15.2 hours (SD=8.7). By assessing the severity and impact of pain on daily performance, both groups presented an average satisfaction higher than 7 points on the Brief Pain Inventory (BPI) scale.

Conclusions: Implementing opioid-free anesthesia protocols along with adjuvant strategies represents an alternative providing good intra and postoperative outcomes. It's safe, and effective and shows a lower incidence of complications, lower need for analgesic rescues, decrease in the length of hospitalization, and increased patients' comfort. Furthermore, the opioid-free regimen helps fight the current epidemic of OUD affecting our communities.



UI Health CHAMPIONS Summer Internship: A "Grow-Your-Own" Youth Health Career Pipeline Program

Rafa Torres: He/Him

- UI Health CHAMPIONS Program Instructor
- UI Health Office of Diversity & Community Health Equity | University of Illinois College of Medicine - Rockford
- *Co-authors:* Sergio Rubalcava | Program Assistant, Jennifer Plascencia | Program Coordinator

Background: Health Professional Shortage Areas are prevalent across the United States (US), including Chicago, Illinois. The lack of underrepresented minority (URM) health professionals in Chicago reflects the reality of healthcare in the US, translating into devastating impacts on underserved communities. The literature has well-documented ongoing barriers to higher education, particularly for environmentally and/or economically disadvantaged students, including URM, further contributing to health inequities. The University of Illinois Hospital & Health Sciences System (UI Health) and the University of Illinois Chicago (UIC), particularly via UI Health CHAMPIONS, have demonstrated commitment to strengthening the health professions pipeline through recruitment and retention based on "Grow-Your-Own" and Diversity, Equity and Inclusion frameworks.

Objective: We aim to describe the UI Health CHAMPIONS 2023 Summer Internship, a six-week in-person health career exposure and health advocacy program for Chicagoland college-bound high school juniors and seniors.

Methods: Eligible CHAMPIONS participants are Chicago Public Schools rising juniors and seniors who reside in UI Health Primary Service Areas, equating to a total of 42 zipcodes. Participants are eligible to receive a stipend upon completion of program milestones. Participants will engage in a multidisciplinary curriculum covering three main tracks: Workforce readiness, post-secondary pathways, and health advocacy. Each track is comprised of a combination of lectures, UI Health/UIC site visits, and interactive workshops grounded on a Team-Based-Learning model. A team of UI Health staff as well as UIC/University of Illinois Urbana-Champaign health professional and pre-health undergraduate student program assistants and volunteers collectively develop and implement the curriculum. Program evaluation tools include a sociodemographic survey; pre-/post-assessments, daily session feedback, and a closing program evaluation; all tools are de-identified.

Results: CHAMPIONS met its attendance and retention goal, with 88% of participants who started the program completing it. Additionally, post-assessment results indicated that 79.55% of participants expressed increased interest in a health professions career as a result of the program. Notably, while 95.23% of participants initially felt confident about college applications, CHAMPIONS still contributed to an 88% confidence rate in navigating this process. Furthermore, the program effectively reinforced commitment, with 100% of participants maintaining their intent to pursue health profession careers both before and after the program.

Conclusions & Impact: Conclusions & Impact: Our high participant retention rate suggests our recruitment and retention strategies are effective. Our recruiting process yielded only participants who were already interested in a health career and the program did not discourage any students from pursuing a health career. Our successful implementation of the 2023 Summer Internship indicates that through a "Grow-Your-Own" Health Career Pipeline, we can help address the shortage of Underrepresented Minority (URM) health professionals in UI Health primary service areas

Addressing Barriers to Cervical Cancer Screening Among Hispanic Women in Cleveland: A Mixed Methods: Analysis

Hui Ting Ruan: She/Her

- Physician / Translator - Research Assistant (In this project)
- MD
- Universidad Centroccidental Lisandro Alvarado School of Medicine, Venezuela
- *Co-author:* Olivia Thomas

The purpose of this study is to identify and address barriers to cervical cancer screening among eligible Hispanic females in Cleveland. This mixed methods research project examines the barriers to cervical cancer screening in Hispanic women in Cleveland, Ohio through interviews conducted during community engagement studio sessions and compares the findings to the data on file in the Behavioral Risk Factor Surveillance System (BRFSS) SMART city data files from 2010 to 2020. Through rigorous quantitative and qualitative analyses, the study identifies the most vulnerable segments within the Hispanic population and proposes tailored interventions to effectively reduce cervical cancer incidence. According to the quantitative analysis, the women most at risk of lower odds of receiving at least one Pap test in their lifetime were uninsured, Hispanic women, and younger women. The women most at risk of lower odds of a recent Pap test were uninsured women and older women. The analysis revealed some prominent themes regarding the perceived barriers to cervical cancer screening, including systemic barriers, lack of education, scheduling, and barriers relating to privacy. Based on these compelling results, this study offers several evidence-based recommendations: 1) targeting education to teenagers and programming in schools; 2) allowing non-MD clinicians to convey education on cervical cancer screening with distributable fact sheets; 3) automatic rescheduling if appointments are canceled; 4) adapting mobile clinics and pop-up events to accommodate Pap tests; and 5) prioritizing the availability of bilingual resources to increase health literacy. Implementing these recommended strategies holds great potential for enhancing awareness of cervical cancer by promoting regular screening practices, reducing mortality rates, and ultimately decreasing the overall incidence of the disease. By systematically addressing the identified barriers, this study contributes to the improvement of cervical cancer outcomes within the Hispanic community in Cleveland and serves as a model for similar initiatives in other regions.

Escalando la Montaña: Obtaining Equal Representation of Hispanic Medical School Faculty



Montserrat Tijerina: she/her/ella

- Medical Student (M3)
- University of Chicago Pritzker School of Medicine
- *Co-author:* Iris Romero, MD; William F. Rayburn, MD; IM Xierali

Background: Fifty-one percent of the U.S. population growth in the last decade was driven by the Hispanic population. As of the 2020 census, 16.3% of the U.S. is Hispanic. Strategies aimed towards increasing the number of Hispanic and other underrepresented minorities in medicine date as far back as the early 1970s.

Objective: We aim to elucidate i) trends among Hispanic faculty in U.S. medical schools, and ii) when representation of Hispanic faculty is predicted to reach parity with the United States Hispanic population.

Methodology: In this retrospective, cross-sectional observational study, U.S. data from the AAMC Faculty Roster was analyzed to identify trends in clinical department faculty of Hispanic origin. Rank of all full-time faculty at LCME-accredited U.S. medical schools from 1972 to 2021 was included. Proportions of faculty across separate departments were compared according to sex and Hispanic status via 2-independent-sample t-tests and simple linear regressions for statistical comparisons.

Results: The number of full-time Hispanic medical school faculty increased from 2.5% in 1972 to 6.2% in 2021. During that time, the U.S. Hispanic population increased from 9.6 million to 62.1 million, and the overall number of medical school faculty increased 3.5-fold. The increase in the number of Hispanic Associate and Full Professors has been steady; however, as of 2021, <3.5% of Full Professors are Hispanic. Specialties with the highest representation of Hispanic faculty include Ob/GYN, Family Medicine, and Pediatrics.

Conclusion: The Hispanic population is the fastest-growing ethnic group in the United States. We undertook a comprehensive analysis to define the trends among Hispanic medical school faculty over the last 50 years. Our results indicate only an incremental increase in Hispanic medical school faculty in that time. Compared to the U.S. population, Hispanic medical school faculty are more underrepresented in 2021 than in 1972. Given current trends, representation of Hispanic faculty is not predicted to ever reach parity with the U.S. Hispanic population. We must redouble efforts to increase Hispanic representation in academic medicine and critically evaluate strategies aimed toward recruitment and retention.

Evaluation Of A Graphic Narrative Patient Education Tool To Reduce Pre-Treatment Anxiety For Patients Receiving Radiotherapy In A Latin American Hospital



Augustin Vannier: He/El

- Medical Student
 - University of Chicago, Pritzker School of Medicine
 - Co-authors: Augustin G.L. Vannier, BA1; Maria Caicedo-Martinez, MD2; Santiago Avila, BA1, Liliana Gutiérrez-Babativa, MS3; María Paula Montenegro Gómez, MS3; Juliette Katherine Gómez Muñoz, MS3; Andrea Prada Álvarez, BS3; Alicia Haydon, BA1; Celyn Bregio, BA1; Michael K. Rooney, MD4; Idalid Franco, MD, MPH5; Brian Callender, MD6; Funmi Olopade MD, FACP7,8; Pilar Ortega, MD, MGM9,10; Tomoko Ichikawa, M.S11; Holman Ballesteros, MD2; Eduardo Antonio Guerrero Lizcano, MD2; Iván Bobadilla, MD3; Alejandro González-Motta, MD3*; Daniel W. Golden, MD, MHPE12*
- * = These authors contributed equally

Background: Radiotherapy can induce anxiety in patients. Education may reduce this anxiety, but the complexity of radiotherapy patient education materials frequently exceeds recommended readability levels. Additionally, there is a dearth of non-English radiotherapy patient education materials. These problems are exacerbated in low- and middle-income countries. A graphic narrative education tool intended to reduce pre-radiotherapy anxiety, the Communicating the External Beam Radiation Experience (CEBRE) discussion guide, was developed and translated into Spanish (CEBRE en Español).

Objective: To measure baseline patient anxiety and knowledge before radiotherapy in Bogota, Colombia, and assess the benefit of CEBRE en Español in reducing anxiety.

Methods: In this ongoing study, patients initiating radiotherapy at the Centro de Tratamiento e Investigación Sobre Cáncer (CTIC) complete a pre-radiotherapy anxiety assessment, receive CEBRE education from a nurse, and then are re-assessed for anxiety. The survey collects basic demographics and cancer diagnosis information and includes the Radiation Oncology Knowledge Assessment Survey (ROKAS; range: 0-8), Hospital Anxiety and Depression Scale (HADS; range 0-21), and Spielberger Trait Anxiety Inventory Short-Form (STAISF; range: 6-24). ROKAS is reported as the standard deviation and HADS and STAISF are reported as the median[interquartile range]. Wilcoxon ranksum is used to compare pre- and post-CEBRE STAISF.

Results: 14 participants are accrued thus far (target accrual = 84). Participant mean age is 57 (range 27-77) with 8 females and 6 males. Cancer diagnoses are breast (n=5), prostate (n=4), and other (n=5). Mean pre-CEBRE ROKAS was 6.9 ± 0.7 . Median pre-CEBRE HADS anxiety score is 6.0[4.0-7.0]. Median pre- and post-STAISF scores are 13.0[12.0-14.0] and 12.0[7.5-13.0] with a median reduction of 3.0[-5.5 to +1.5] ($p=0.051$). Comparisons with United States patient anxiety data and a multivariable linear regression are pending accrual of more participants.

Conclusions: This ongoing project is the first to establish baseline levels of knowledge and anxiety among patients initiating radiotherapy in Latin America. Preliminary results are encouraging but efficacy of CEBRE en Español at reducing patient anxiety will be further evaluated after full enrollment of study participants. Future directions include a stepped-wedge trial to prospectively evaluate graphic narrative education over traditional education methods and translation of CEBRE into additional languages.

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- 1 University of Chicago Pritzker School of Medicine, Chicago, IL, USA
- 2 Instituto Nacional de Cancerología, Bogotá, Colombia
- 3 Fundación Centro de Tratamiento en Investigación sobre Cáncer Luis Carlos Sarmiento Angulo (CTIC), Bogotá, Colombia
- 4 MD Anderson Cancer Center, Houston, TX, USA
- 5 Department of Radiation Oncology, Brigham and Women's Hospital and Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, USA.
- 6 Section of Hospital Medicine, University of Chicago Medicine, Chicago, Illinois, USA.
- 7 Center for Clinical Cancer Genetics and the Center for Global Health, University of Chicago Medical Center, Chicago, IL, USA.
- 8 Division of Hematology Oncology, University of Chicago Medical Center, Chicago, IL, USA.
- 9 Department of Diversity, Equity, and Inclusion, Accreditation Council for Graduate Medical Education, Chicago, IL, USA
- 10 Departments of Medical Education and Emergency Medicine, University of Illinois College of Medicine, Chicago, IL, USA
- 11 Institute of Design, Illinois Institute of Technology, Chicago, IL, USA
- 12 Department of Radiation Oncology, Rush University Medical Center, Chicago, IL

Mobile Migrant Health Team: Case Report of Renal Hypoplasia in Crisis Migrant Population

Jenny Wang: She/Her

- Communications and Media Director for Mobile Migrant Health Team
- Medical Student- University of Illinois Chicago College of Medicine
- *Co-authors:* Sara Izquierdo MPH, Miguel del Busto, Sarah Medina-Aguirre, Sara Cooper, Yishin Chang, Leena Abbas, Dr. Cailean McKay MD, Dr. Evelyn Figueroa MD

Background: Mobile Migrant Health Team (MMHT) provides health assessments for migrants arriving in Chicago. Our team identified S.S., a 26-year-old asylum seeker from Mexico with congenital renal hypoplasia diagnosed 4 years prior. He presented with symptoms of uncorrected metabolic acidosis and hyperkalemia after missing dialysis for five days. MMHT is facilitating care for the patient; as such, this case report centers on the lack of access to care many asylum seekers from South and Central America face as they travel to the United States. We discuss new strategies for deliverance of care to asylum seekers arriving in Chicago during a declared state of emergency.

Objective: To address this patient's critical condition and the effects of missing hemodialysis treatments, MMHT connected him to resources for acute and long term treatment. Once stabilized, the team will continue to help the patient and family with organizing kidney transplant and further care.

Methods: MMHT directly connects patients with medical and social care. In this way, the organization facilitates care and follow-up in an effective and culturally sensitive manner.

Results: Upon arrival in the United States, Texas immigration authorities detained S. S. and sent him to Chicago, preventing him from receiving timely treatment. Missing hemodialysis treatments, even briefly, can result in twofold mortality risk and other severe consequences.

Patient arrived with pH 7.12, potassium 7.4, bicarbonate 12, with 3 days of progressive confusion, nausea, and vomiting. In the emergency department, he received treatment for acidity reduction and cardiac protection and was placed on emergent hemodialysis for 8 hours. MMHT facilitated emergency Medicaid application and contact with a community dialysis center.

MMHT will assist with navigating the kidney transplant system as the patient has several family members interested in a paired donation.

Impact: Migrants from South and Central America face serious health consequences while in transit. MMHT provides assessment to migrants upon immediate arrival to Chicago, and addresses barriers to care by providing patients with health resources. By directly connecting patients with clinicians, social workers, and other health professionals, our organization has demonstrated strategies for pursuing efficient healthcare justice in migrant populations.

Social Media: Instagram @mmhtchicago

www.linkedin.com/in/jenny-wang-9286221a8

NAMS ORAL PRESENTATIONS



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Friday, October 13th



Lightning-Style Medical Spanish Presentations: Improving curriculum & training

Empowering Students and Physicians to become Medical Spanish Ambassadors as a Strategy to Improve Hispanic Health Equity

Bahareh Sharafi

- Medical Student
- Ross University School of Medicine
- *Co-authors:* Kally Dey, Celyn Bregio, Elise Edwards, Pilar Ortega
- **Affiliations:**
- Kally Dey, BA, Northwestern University Chicago College of Osteopathic

Medicine, Downers Grove, IL

- Celyn Bregio, BA, University of Chicago Pritzker School of Medicine, Chicago, IL
- Elise Edwards, BA, University of Miami Miller School of Medicine, Miami, FL
- Pilar Ortega, MD MGM, Departments of Medical Education and Emergency Medicine, University of Illinois College of Medicine and Department of Diversity, Equity, and Inclusion, Accreditation Council for Graduate Medical Education, Chicago, IL

Background: United States' patients with Spanish language preference face language-related healthcare disparities, including reduced access to primary care, increased risk of medical errors, and worse outcomes than their English-speaking counterparts. The current multilingual physician workforce is insufficient to support the growing Spanish-speaking population. Most medical schools offer medical Spanish education, yet only 21% of these programs meet basic educational standards of having a faculty educator, a formal curriculum, learner assessment, and course credit. Many schools rely on medical students to teach medical Spanish without faculty supervision or to serve as ad hoc interpreters. Multilingual medical students and physicians can serve as medical Spanish ambassadors—leaders who catalyze change at their institutions through validated educational tools and resources for teaching medical Spanish.

Objectives: Following the session, attendees will be able to:

1. Describe importance of language-concordant healthcare.
2. Define the concept of a medical Spanish ambassador and describe the steps needed to assume this role.
3. Create an elevator pitch they can use to advocate for initiating or enhancing medical Spanish education at their institution.
4. Network with others interested in advocating for sustainable, evidence-based medical Spanish programs that facilitate language-concordant communication with Spanish-speaking patients.

Methods: This interactive workshop includes:

An 8-minute assessment to evaluate participants' existing knowledge and experiences regarding medical Spanish.

A 10-minute didactic overview to present the role of a Medical Spanish Ambassador and introduce the Medical Spanish Ambassador Toolkit. Attendees will be guided through a four-part model for effective medical Spanish advocacy.

A 25-minute activity in which participants will develop a medical Spanish elevator pitch to administration utilizing toolkit data, personal experiences and the four-part model for curricular advocacy. Next, participants will share ideas and gather feedback in facilitated small groups.

In the final 7 minutes, participants will complete a survey and provide session feedback.

Conclusions & Impact: Our workshop will educate participants on language-concordant care, introduce Medical Spanish Ambassadorship, and provide resources to advocate for evidence-based medical Spanish programs. This workshop will empower a growing community dedicated to medical Spanish, support development of effective medical Spanish programming, and promote health equity for Spanish-speaking patients.

A comprehensive undergraduate medical Spanish curriculum model: the VIDA Medical Spanish Curriculum



Alexandra Lopez Vera: She/her/hers

- PhD/ Assistant Professor of Medical Education - Medical Spanish program Director
- Medical Education professor, and MPH (expected Fall 2024)
- California University of Science and Medicine
- *Co-authors:* Kyle Thomas, Jennifer Lewis

Background: The healthcare system in the United States has long struggled with racial and language disparities, which can result in inadequate treatment of minority patients. With the projected growth of the Hispanic population in the US, there is an urgent need for medical schools to incorporate high-quality medical Spanish and cultural competency content to address the increasing demand for Spanish-speaking and culturally sensitive physicians.

Objective: To create a comprehensive medical Spanish curriculum, aligned with the preclinical curriculum, that could offer a solution to these issues by ensuring that Hispanic patients receive care that is linguistically and culturally appropriate, ultimately leading to better health outcomes for all.

Methods: The study used the Kirkpatrick Model to evaluate the medical Spanish curriculum's success. The evaluation process included a Spanish Objective Structured Clinical Examination and a survey with a 40-question Multiple-Choice Exam to evaluate the integration of Spanish language skills and cultural competency in clinical encounters. Descriptive statistics were used to summarize exam results, and mean exam results were compared between students of different proficiency levels using two-tailed t-tests.

Results: The study found that students achieved a mean score of over 80% on all three components of the Spanish Objective Structured Clinical Examination and on the Multiple-Choice Exam, with advanced students scoring higher on some sections. Survey data suggest that students felt able to communicate in Spanish with patients after completing the course series. The study also provides a model for a medical Spanish curriculum that applies expert-recommended best practices to meet the needs of Hispanic patient populations.

Conclusions:

Baseline data on student perceptions and Spanish competency are not sufficient for making comparisons.

· Social Media handle: <https://www.linkedin.com/in/alexandralopezvera/>

Exploring Challenges and Innovations in Medical Spanish Assessment: An Analysis of Educators' Views on Assessing Students and the Need for Standardized Evaluation Tools



Diana Galarreta-Aima: she/her/hers

Associate Professor of Spanish

Language professor

James Madison University

Co-authors: Andrea Nate, PhD, Assistant Professor of Spanish at University of North Alabama



Alyssia Miller De Rutté: she/her/hers

Assistant Professor of Spanish for Specific Purposes, Director of Languages for Specific Purposes, Graduate Teaching Assistant Coordinator

Language professor

Colorado State University and University of Colorado School of Medicine

Background:

Despite the increasing offerings of Medical Spanish classes and programs at U.S. institutions of higher education, this field still lacks recognition as a valid empirical area of research. Acknowledging the importance of more evidence-based studies, this presentation will describe an ongoing project led by three Medical Spanish educators on assessment at the undergraduate level. The presentation will focus on the first part of this project: the analysis of focus group interviews with Medical Spanish instructors across the U.S. about their views on the evaluation of students' linguistic and cultural abilities and the challenges they face when assessing these skills. In this presentation, we will describe the results of these interviews, with special emphasis on the lack of standardized evaluation tools (e.g., rubrics) on Medical Spanish education at the undergraduate level.

Objectives: (1) To identify and describe challenges Medical Spanish educators face when assessing their students; (2) To make assessment suggestions based on the data collected from the interviews

Method: Medical Spanish instructors were interviewed individually or in focus groups, based on participant preference. Interviews were recorded, transcribed, and coded following line-by-line coding. Codes were grouped into categories, and themes were created.

Results:

Themes that emerged from the data were rubrics, challenges in assessment, community engagement, diverse language proficiency, and cultural competence. Data analysis showed that Medical Spanish instructors think more broadly and creatively about how to evaluate student success in Medical Spanish courses as compared to general Spanish language courses. Participants indicated the need for standardized rubrics and assessments that go beyond traditional components relating to grammar and vocabulary and even medical terminology, expressing the need to include categories on pragmatic, sociolinguistic, and intercultural skills.

Conclusions & Impact:

Medical Spanish assessment at the undergraduate level needs more evidence-based studies and collaboration in order to develop standardized evaluation tools to assess students' linguistic and cultural skills. Implications regarding the use of rubrics and types of assessment for undergraduate Medical Spanish courses are discussed.



Michelle Martinez: She/ella
Clinical Instructor
The University of Texas at El Paso



Laura E. Mendoza: She/ella
Assistant professor of instruction
The University of Texas at El Paso



Jeri Sias: She/ella
Clinical Professor
The University of Texas at El Paso
Preparing Pharmacists to Counsel on Medication Use in Spanish

Background: Pharmacy educators have the opportunity to provide clear and simple medication use information in Spanish. One way to integrate skill development of technical Spanish in pharmacy curricula is by using Objective Structured Clinical Examinations (OSCEs). One pharmacy school located on the US-Mexico border seeks to address pharmacy Spanish use across the curriculum as it serves a community where two-thirds of the population speak Spanish at home.

Objective: To integrate OSCE assessments for the Pharmacy Spanish curriculum to foster safer and improved medication communication and cultural rapport while counseling Spanish-speaking patients.

Method: Faculty developed Spanish-based OSCEs integrated into three years of the pharmacy curriculum using clinical cases to simulate medication counseling on a variety of formulations and disease states. Students were required to use cultural courtesies (e.g., usted, greetings) and resolve medication use errors. During assessments, students randomly received a case to conduct with a Spanish-speaking simulated patient (SP). Students addressed SPs in simple and culturally-appropriate manner, collected relevant social and medical history, counseled on and verified correct medication use, and enhanced their listening and documentation skills.

Assessments included two parts: oral and written. Faculty used rubrics to evaluate students on grammar, vocabulary, cultural courtesies, clarification of information, and ability to communicate ideas with appropriate health literacy.

Results:

This pharmacy Spanish curriculum included OSCEs presented as summative assessments with linguistic and cultural elements. Three cohorts each completed thirteen assessments during the three years of Pharmacy Spanish (total six credit hours). To improve safer counseling in Spanish, students practiced how to communicate medication and disease-related information while reinforcing their listening and verification skills. Students learned to communicate with simplified Spanish so that patients coming various educational levels and health literacy could understand.

Conclusion and Impact:

In this Pharmacy Spanish portion of the curriculum, OSCE assessments integrated clinical, cultural, and technical language skills. By the end of their third year, pharmacy students built a simplified vocabulary for communicating medication information to be more culturally responsive to their patients and clarify patient understanding. We aim to continue refining modules for other Pharmacy Schools to use OSCE-like assessments to improve provider-patient communication in Spanish.

Innovative applications of Medical Spanish Round 2



A Review of Medical Spanish Curricula at California's Four Hispanic Center of Excellence Institutions

Alejandro Dauguet: He/him/his

- NAMS Student Coalition Member
- Undergraduate student
- UC San Diego

Background: In the state of California, the Hispanic-American population continues to grow, yet the number of physicians linguistically and culturally equipped to service this demographic is being outpaced. Over the last few years, the four Hispanic Center of Excellence (HCOE) institutions in California have worked independently to institute medical Spanish (MS) education curricula and teach patient-provider communication skills, all in an effort to bolster the Hispanic physician workforce's size, language ability, and utilization of such towards clinical environments.

Objective: We provide a review of the current status of MS educational efforts, examine areas that have garnered success, and outline recommendations for improving the quality of future MS course offerings at these campuses.

Method: A thorough literature review was conducted, following the guidance of previous work on Medical Spanish design and narrowing in on California's most up-to-date Hispanic demographic needs. A series of virtual interviews were conducted with HCOE faculty and students, followed by a qualitative analysis of class composition and structure, student involvement, and prospects for future growth. Finally, recommendations were generated that identified key spots for institutionalizing Medical Spanish into HCOE medical school curricula.

Results: General student consensus was that patient workups/case studies served as the most useful outlets for language use, with cultural discussions second and grammar review third. Half the groups suffered from a lack of structured curricula and avenues for in-house practice, but only one relied on student efforts for instruction.

Conclusions & Impact

Expected recommendations for upgrading HCOE Medical Spanish curricula in California include: longitudinal institutionalization of material, immersion workshops to drive community involvement, pooling feedback data for evaluating course efficacy via an HCOE coalition, and association with NAMS to accelerate the development of Medical Spanish in the state. These results will inform next steps in terms of determining allocation of grant funding towards HCOE programs, strengthening the implementation of Medical Spanish use into residency and beyond, and shrinking the deficit in California's Hispanic and MS-equipped physician workforce

Social Media handle: [linkedin.com/in/alejandro-dauguet-61606532/](https://www.linkedin.com/in/alejandro-dauguet-61606532/)



Co-authors: Ramon Hernandez, DrPH, MPH - Section Chief for Community Health, Department of Pediatrics, University of California, San Diego School of Medicine, Patricia E. Gonzalez-Zuniga, MD AAHIVMS - Clinical Assistant Professor, Department of Family and Preventive Medicine, University of California, San Diego School of Medicine, Natalie Rodriguez, MD - Associate Clinical Professor, Department of Family Medicine and Public Health, University of California, San Diego School of Medicine, Reena Thomas, MD PhD - Associate Dean of Diversity in Medical Education, Stanford School of Medicine, Leticia Rolon, MD - Associate Professor, Department of Medicine, University of California San Francisco, Victoria Juarez - Program Coordinator, Latinx Center of Excellence, University of California, Berkeley School of Social Welfare
Lisette Maria Flores - Associate Director, Latinx Center of Excellence, University of California, Berkeley School of Social Welfare
Luna Calderon, MSW - Training Consultant in Behavioral Health, Latinx Center of Excellence, University of California, Berkeley School of Social Welfare

Development And Validation Of A Medical Spanish Elicited Imitation Task: A Novel Approach To Measure Discipline-Specific Language Proficiency



Alyssia Miller De Rutté: she/her/hers

- Assistant Professor of Spanish for Specific Purposes
- Language professor
- Colorado State University and University of Colorado School of Medicine

William Morgan, PhD: He/His

- Title/Position: Assistant Professor of Spanish Linguistics
- Language professor
- West Virginia University

Background: The Elicited Imitation Task (EIT) is an instrument that accurately measures language proficiency by way of a repetition of increasingly difficult sentences. There is significant research showing its efficacy (Kim et al., 2016; Ortega, 2000; Tracy-Ventura, 2014), but it has yet to be tested using discipline-specific information. As previous research shows, medical Spanish proficiency may not be sufficiently evaluated by existing generalized written and oral proficiency tests (Ortega, 2018), which jeopardizes the healthcare of already vulnerable populations (Ortega, Diamond, et al., 2020; Ortega, Perez, et al., 2019), and there is no way to track medical Spanish proficiency development over time.

Objective: Therefore, the purpose of this study was to develop and validate a medical Spanish version of the EIT to measure medical Spanish proficiency.

Method: The Medical Spanish EIT was developed using high frequency medical Spanish terminology (Miller De Rutté, forthcoming) and was tested with different groups of participants with varying levels of proficiency and medical backgrounds. Groups included Spanish native speakers, heritage speakers, advanced second language (L2) users, and beginner/intermediate L2 learners with or without medical backgrounds. Participants completed a background questionnaire, the General Spanish EIT (Ortega, 2000), the Medical Spanish EIT, and the Adapted Interagency-Language-Roundtable Scale for Physicians. Data collection occurred in person or online with all sessions being audio-recorded. After data collection was complete, responses to both versions of the EIT were coded.

Results: Preliminary results compared against and between groups have shown strong validity of the Medical Spanish EIT for discerning appropriate proficiency in Spanish. Results also indicate that there is a difference in proficiency levels between the General Spanish EIT and the Medical Spanish EIT.

Conclusion & Impact: This project seeks to add to the growing body of research on medical Spanish by investigating the use of a discipline specific EIT and to compare how general Spanish proficiency compares to medical Spanish proficiency. Additionally, the development of a medical Spanish EIT can provide a means to track longitudinal proficiency development in a no-cost and time-efficient manner.



Communicating medical science through Graphic Medicine: The language of medicine for patients

Ingrid Cobos Lopez

- Associate Professor
- University of Cordoba (Spain)

Doctor-Patient communication is a crucial point in the delivery of high-quality healthcare. The language of Medicine offers intriguing challenges both to doctors and patients. Furthermore, research in Medicine is essential for scientific advancement and for the knowledge, treatment, and cure of various pathologies that affect a very high percentage of humanity. This technical information is globally transmitted in English, the language used in this area of knowledge. Likewise, the language in which advances in Medicine are communicated is part of a complex technoclect, only accessible to specialists. For this reason, when patients suffering from one of these pathologies, for example, cancer, want to learn about the latest advances in their disease, they find a wide variety of entirely incomprehensible texts for them and their families. In this sense, and to bring this scientific knowledge closer to the patient and their families in the area of humanities of the university of Cordoba, we have created oncoTRAD, a project that connects Medicine, Art, and Translation through Graphic Medicine. This multidisciplinary creates a dialogue across totally different disciplines, in which current scientific articles on cancer, risk factors, treatment, typologies, etc., are translated and adapted into simple, clear, and direct texts (like comics, infographics, leaflets, etc.); so that the actual receiver of these texts, the patient, can understandably obtain information about his/her disease, and thus achieve the ultimate goal of the mentioned transmission. This kind of translation is what we call "Community Translation." In this paper, we will show our methodology and the results of our project which are of special interest in multicultural societies like in the USA.

Assessing Language Proficiency Improvement in Intensive and Longitudinal Medical Spanish Courses



Rose Molina

- Medical Language Program Director
- Attending physician
- Harvard Medical School, Beth Israel Deaconess Medical Center
- *Co-authors:* Kari Hannibal, Marcie Naumowicz, Jeffrey N. Katz, Jennifer Kasper

Background: Many medical schools have created Medical Spanish courses, ranging from beginner to advanced levels and varying in duration and intensity. Standardized language proficiency assessments are lacking to

benchmark language proficiency for clinical care among medical students.

Objective: We aimed to assess medical student language proficiency according to a qualified bilingual staff assessment before and after two Medical Spanish courses (one intensive, one longitudinal).

Method: Medical students took the ALTA Clinician Cultural and Linguistic Assessment (CCLA) before and after their online Medical Spanish courses. The intensive Medical Spanish course was a one-month course with 21 hours of instruction per week taught by instructors from Costa Rica for the beginner-intermediate level. The longitudinal Medical Spanish course was a weekly 1.5-hour course for 13 weeks over the Fall semester for the advanced level. Enrolled students completed the ALTA CCLA pre- and one week post-course for intensive Medical Spanish in Fall 2020 and for longitudinal Medical Spanish in Fall 2022. We report descriptive statistics of the pre- and post-course scores between the two Medical Spanish courses. A score of 80 or above out of 100 indicates professional proficiency for clinical encounters without an interpreter.

Results: Five students in the intensive Medical Spanish course completed the ALTA CCLA twice. The pre-course and post-course means, medians, and ranges are 55, 64, 70, respectively (Figure 1). All students demonstrated improvement in their scores. Two students demonstrated sufficient proficiency to use Spanish in clinical encounters without an interpreter. The pre-course and post-course means, medians, and ranges of the seven students in the longitudinal Medical Spanish course are 72, 74, 32, respectively. Five of seven students demonstrated improvement in their scores, and two students met the cut-off for using Spanish without an interpreter. The differential between the pre- and post-scores in both courses are shown in Figure 2.

Conclusions & Impact: This exploratory study is among the first to apply the ALTA CCLA to medical students taking two types of Medical Spanish courses. Our results suggest that intensive Medical Spanish courses may be more effective in boosting language proficiency than longitudinal Medical Spanish courses.

Saturday October 14th

Medical Spanish Oral Presentation Lightning Rounds: Connecting curriculum to research and culture

Spanish for Mental Health at the Undergraduate Level: Challenges and Opportunities

Rafael Iglesias: He/Him

- Professor of Spanish
- Language professor
- Benedictine University
- Anthony Cella, Pat Somers, and Gina Panozzo.

This presentation will discuss the challenges and opportunities for undergraduate-level Spanish language programs in the coming years, and, especially, how US higher learning institutions could make their foreign language offerings more attractive and impactful by moving away from the structure of traditional Spanish programs (typically built around culture, civilization, and literature) and more towards "Spanish for the Professions."

Additionally, this presentation will discuss the lessons learned by Benedictine University's faculty in the process of creating a Minor in Spanish for Mental Healthcare that, we believe, will be one of the first undergraduate-level programs of this type in the US.

The project required an interdisciplinary collaboration between several departments and was supported by a National Endowment for the Humanities grant.

Importantly, the new minor involved the creation of a new, upper-level, undergraduate-level, Spanish course on Latinos and mental health (SPAN 3325: Advanced Spanish for Mental Health). This course was designed to 1) raise the student's proficiency level to at least a level of ACTFL Intermediate-Mid in all four language skills (speaking, writing, listening comprehension, and reading comprehension), 2) introduce students to basic information on mental health topics (including the most prevalent mental health conditions among the US Latino population and some basic understanding on how to detect and treat them effectively), 3) teach students highly specialized mental health terminology in both Spanish and English, 4) improve their level of cultural competency, especially as it relates to the US Latino population, and, finally, 5) provide them with sufficient knowledge and practice to be able to serve effectively as interpreters in a variety of medical settings, including mental healthcare. The minor as a whole and the new course in particular also seek to encourage as many Latinx students as possible to consider pursuing careers in healthcare, especially mental healthcare. Some teaching sample materials will be shown during the presentation, and the results of some internal and external students interests surveys will be shared.

The presenter would like to use this opportunity to encourage other higher learning institutions to pursue similar projects and, especially, would appreciate receiving as much information as possible regarding potential areas of improvement, additional resources, and potential partnerships, as well as information on similar projects that might exist elsewhere in the US.



Estrategias Pedagógicas De Aprendizaje Del Español Médico Basadas En Proyectos Comunitarios Que Se Enfocan En Disminuir Barreras Comunicativas De La Población Hispana

Yolanda Pineda-Vargas: She/ Her/ Ella

- Continuing Spanish Lecturer
- Language professor
- UNIVERSITY OF CALIFORNIA, MERCED
- *Co-authors:* Kimberly Sanchez (Doctoral Student, Public Health), Brenda Castaneda-Casataneda

Antecedentes: En el condado de Merced, ubicado en el Valle Central de California, más del 42% de la población solo habla español. Esto crea una barrera de comunicación que afecta la calidad del servicio médico que estos hispanos reciben debido al insuficiente personal médico capacitado o entrenado para interactuar efectivamente con esta población. Además, los intérpretes no son suficientes para atender la demanda. Por otra parte, más del 54% de los estudiantes que hacen parte de la Universidad de California, Merced (UC Merced) son de origen hispano, lo que los hace conscientes de la necesidad de información médica en un lenguaje sencillo y comprensible en español para que esta población se sienta incluida y reciba la atención de la calidad que se merece.

Objetivos: Los objetivos de esta presentación son: 1) Compartir y describir la estrategia pedagógica que se ha empleado exitosamente por más de 17 años; y 2) Analizar y discutir las ventajas y desventajas de crear oportunidades para difundir temas de salud en español con la comunidad a través de service-learning.

Métodos: La metodología se centra en presentar materiales desarrollados, relatos y experiencias de estudiantes y su impacto en la comunidad.

Resultados:

Los estudiantes que han sido partícipes de esta experiencia educativa manifiestan haber aprendido sobre terminología y temas médicos, así como también sobre traducción e interpretación médica mientras participan en proyectos de service-learning y desarrollan expertísimo en temas médicos que afectan la población del Valle Central de California.

Conclusión e impacto: Mediante el trabajo conjunto de estudiantes que han tomado las clases de Spanish for Health Professionals (desde el 2006) y Spanish Medical Translation and Interpretation (desde el 2021) y la comunidad se han desarrollado materiales visuales y audiovisuales, hemos participado en ferias y carnavales de salud, además de crear y participar en conferencias dentro y fuera de la universidad. Todo esto ha contribuido en la disminución de la barrera de comunicación en salud que enfrentan los hispanos en esta parte del país.

An Exploration of Healthcare Professionals' Experiences and Perceptions of Language and Cultural Differences in Interpreter-Mediated Patient Care



Alyssia Miller De Rutte: she/her/hers

- Assistant Professor of Spanish for Specific Purposes
- Language professor
- Colorado State University and University of Colorado School of Medicine

Margaret Smith: She/Her

- Research Associate
- B.S. Biological Science, Minors in Chemistry and Spanish
- Colorado State University

Background: In the U.S., over 41.7 million people speak Spanish at home, and approximately 39% of this demographic speak English less than very well (Dietrich & Hernandez, 2022). In healthcare, the complexities of patient-provider communication are compounded when there is no shared language (Ortega, 2018). Previous research indicates that patient perception of quality of healthcare is decreased when there are language and/or cultural differences between the patient and the healthcare professional (Al Shamsi et al., 2020).. Non-English Language Preference (NELP) patients will often require the use of an interpreter when utilizing healthcare services, which can present additional challenges especially when discussing sensitive medical information (Roter et al., 2020).

Objective: Therefore, the purpose of this study was to investigate the experiences and perceptions of healthcare professionals when using interpreters to communicate with NELP patients.

Method: Twenty-one healthcare professionals were interviewed. Interviews were transcribed and coded with qualitative software following a thematic analysis approach. Researchers independently coded line-by line using inductive, in-vivo coding and then discussed any discrepancies between codes before creating categories and themes.

Results: Healthcare professionals reported that quality of care was "definitely impaired" and "substandard" when language or cultural differences are present between the healthcare professional and patient even with the use of interpreters. Healthcare professional expectations of interpreters varied widely from strict "literal translation" to patient advocacy and acting as a cultural liaison. Healthcare professionals also stated specific concerns using an interpreter, which included concerns about language accuracy and variation and interpreter qualifications, bias, and availability. Additionally, healthcare professionals perceived that NELP patients experienced many negative emotions such as fear, worry, mistrust, frustration, or disrespect when language or cultural barriers existed. Although almost all healthcare professionals confirmed their willingness to learn another language and culture, lack of time was cited as a common barrier.

Conclusions and Impact: This study provides evidence to inform the importance of continued research on the experiences of healthcare professionals, interpreters, and patients in order to improve healthcare outcomes for NELP patients. Implications surrounding education for healthcare professionals, interpreters and patients are discussed.



La Literatura Como Un Medio Para Abordar Aspectos Médicos De La Cultura Hispana

Julio César Aguilar: He, Him, His

- Senior Lecturer of Spanish
- Language professor
- Baylor University

Antecedentes: Hace 40 años el primer número de la revista publicada por la Universidad Johns Hopkins, Literature and Medicine, se cuestionaba sobre la relación entre ambas materias. En el campo interdisciplinario de las

humanidades médicas, la literatura es sólo una de las varias disciplinas humanísticas que puede proveer diversas perspectivas sobre la ciencia médica. El estudio de obra literaria a nivel universitario por los estudiantes de pre-medicina puede aportar valiosa información complementaria a su educación científica. A través de la lectura de textos de autores hispanos que abordan los temas de la salud y la enfermedad, los estudiantes obtienen una mejor comprensión de los aspectos psicológicos y sociológicos de la enfermedad en el contexto cultural del mundo hispanohablante.

Objetivo: El presente ensayo demuestra los beneficios que el estudio de la literatura logra proporcionar a los estudiantes de pre-medicina, además de ofrecer una sugerencia del contenido que se pudiera incluir en una clase de Español a nivel intermedio de Conversación y Composición que desee explorar a través de las lecturas la expresión de la salud y la enfermedad en el contexto hispano.

Método: Mis estudiantes de Baylor University del curso de Español 3302, Conversación y Composición, con un enfoque en la salud y medicina en la cultura hispana, tienen como una de las asignaciones en el sílabo escribir un breve ensayo de investigación de alguno de los textos literarios leídos para la clase durante el semestre. Las lecturas incluyen poemas, cuentos, y un capítulo de novela y testimonio de autores de diversas épocas y latitudes del mundo hispano.

Conclusiones e impacto: Además de que la lectura de poemas y cuentos, entre otros géneros literarios, logra sensibilizar al lector, y por ende al estudiante, éste también adquiere conocimientos significativos en relación a la salud y la enfermedad en los países hispanos en el proceso de la escritura del ensayo. Las variadas perspectivas culturales en torno a los aspectos médicos que adquieren los estudiantes a través del análisis de la obra primaria en el ensayo resultan reveladoras de su aprendizaje.

Social Media: https://twitter.com/juliocaguilar_

<https://www.linkedin.com/in/julio-c%C3%A9sar-aguilar>

A Call for Emphasizing Psychiatry in Medical Spanish Research: A Step Towards Addressing Latinx Mental Health Disparities

Bazif Bala

- 2nd Year Medical Student
- Warren Alpert Medical School of Brown University
- Co-authors: Maria del Pilar Trelles Thorne, MD- Child/Adolescent Psychiatrist & Associate Professor of Psychiatry and Human Behavior at the Warren Alpert Medical School of Brown University

Background: Mental health disparities persist in Latinx communities, with individuals less likely to receive mental health services compared to White individuals. These differences persist even when adjusting for income and education level. Furthermore, there has been a reported decrease in mental health services offered in Spanish. Medical Spanish education can potentially address this gap, but the inclusion of psychiatric education within these curricula remains poorly defined in literature.

Objectives: This study aimed to analyze the visibility of psychiatry curriculum within published Medical Spanish journal articles.

Methods:

An initial screening of peer-reviewed articles related to Medical Spanish was conducted, yielding 21 relevant articles. 13 articles related mostly to theory or intentionally focused on a specific organ system were removed, and eight articles focusing on curricular items (5) or Objective Structured Clinical Examination (OSCE) examinations (3) for Medical Spanish were analyzed for content.

Results: As a whole, of the 8 analyzed articles, Psychiatry material (symptoms, discussion of associated diagnoses, screening) was included in half (40.0%), in comparison to systems like GI and respiratory, which were included in seven (87.5%), and eight (100%), respectively. Our statistical analysis using a two-proportion Z-test (95% CI) revealed a significant difference between the proportions of articles including Psychiatry and Respiratory system-related materials ($p=0.02088$). Among three articles featuring sample OSCE scoring guides, two (67%) include no requirements on screening for mental illness.

Conclusion/Impact: This disparity underscores an under-representation of visible Psychiatry concepts within published journal articles related to Medical Spanish. The sparse representation of psychiatry in Medical Spanish research may inadvertently hinder addressing Latinx mental health disparities. With about eight million Latinx adults reporting mental illness per year, a visible, mental health-inclusive Medical Spanish curriculum in research is needed. Highlighting psychiatry may inspire institutions to prioritize psychiatric disease discussions within their Medical Spanish programs, which is particularly important considering the population-specific factors and stigmas impacting Latinx mental health. In essence, enhancing visibility is an important first step towards developing a robust, standardized Psychiatric component in Medical Spanish coursework.



Integrating Medical Spanish into health care programs with a focus on community service

Monica Rojas Chavez: she/her/hers

- Medical Director of International Medicine and Cultural Education
- Language professor
- Arkansas Colleges of Health Education ACHE

Arkansas era un estado donde la comunidad latina no era muy abundante. Hoy en día, alrededor del 7.5% de la población en el estado de Arkansas

habla un idioma diferente al inglés, siendo el español el idioma de predominancia. Aunque muchos latinos entienden inglés o lo hablan con limitaciones para llevar a cabo las labores del día a día, una consulta médica significa un estrés para muchos, teniendo que explicar sus afecciones en inglés o debiendo utilizar un intérprete que en muchas ocasiones no es apto para traducir dentro del ámbito de la salud. En la nueva universidad de medicina y otras ciencias de la salud (ACHE) ubicada en Fort Smith AR, se ha iniciado un programa de Español Médico con el fin de proporcionarles a los futuros médicos, PTs y OTs con herramientas que les ayuden a dar un mejor servicio a la comunidad. El proyecto inició con un programa piloto en 2021 con ayuda de los recursos brindados por NAMS, la Dra Monica Rojas inició con clases semanales donde no solo se aprende español sino que se discuten las diferencias culturales que existen entre los hispanos de diferentes nacionalidades. Además el entrenamiento se integra con servicio a la comunidad latina local e internacional. Los estudiantes participan de 2 encuentros con Pacientes estandarizados completamente en español, luego se cierra el año con un evento de alcance donde se realizan papanicolaus y los estudiantes además de realizar la entrevista médica completa, historia clínica ginecología completamente en español, realizan el procedimiento dando las instrucciones así mismo en español. Muchos estudiantes se preparan para realizar rotaciones clínicas en países de latinoamérica donde pueden sumergirse en la cultura y el idioma después de llevar el curso de español Médico. constantemente se realizan servicios comunitarios en escuelas, iglesias y otras organizaciones que tienen actividades para la comunidad Hispana y donde los estudiantes brindan atención en español.

Round 3 - Medical Spanish Oral Presentation Lightning Rounds



Supporting Medical Spanish Curricula in US Medical Schools: Students as Standardized Patients for Peer-to-Peer Communication Skills Practice and Feedback

Daniela Bresciani Padilla: She/Her/Hers

- 3rd year Medical student
- University of Puerto Rico School of Medicine
- *Co-authors:* Mariana Sadurní, Daniela Bresciani, Raúl Roura, José Martínez, Bianca Rodríguez, Alexandra Vélez, María Córdova, Sebastián Estarellas, Ismael Pérez, Dr. Debora Silva

Background: The Hispanic population in the United States (US) has grown rapidly, yet only 22% of physicians self-identify as Spanish speakers. Language barriers can hinder patient well-being, treatment adherence, and satisfaction, highlighting the need for medical professionals who can provide language-appropriate healthcare. Providing accessible practice materials in Spanish such as standardized patient (SP) activities to English-speaking medical students will create competent physicians who can adequately address Hispanic patients' health concerns. However, the majority of US medical students lack opportunities for Spanish-speaking SPT interactions. As the only bilingually trained medical students in the country, students at medical schools in Puerto Rico (PR) are well-suited to be trained as Medical Spanish SPs, capable of providing peer-to-peer communication skills practice and feedback for US (non-PR) medical students.

Objectives: This study aims to assess the impact of practice and feedback with Spanish-speaking SPs on medical students studying Medical Spanish at US medical schools. Specific objectives include training Spanish-speaking medical students from PR medical schools to act as SPs and provide feedback, contributing to the training of culturally competent future physicians to address the needs of the growing Hispanic/Latino population in the US.

Methods: The study consists of two phases. Phase 1 involves training medical students in PR as SPs through formal training provided by the University of Puerto Rico's Clinical Skills Center. Pre- and post-training surveys will be given to assess students' experience, confidence, and knowledge on SP training. Phase 2 entails collaborating with US medical schools to pilot the Medical Spanish Standardized Patient program, where trained PR students act as SPs for US medical students. A post-program survey will be administered to assess the students' perception of the SP interaction.

Results: Pending outcomes.

Conclusions and Impact: This study aims to improve patient-physician communication and care for Hispanic populations in the US by training bilingually trained medical students from PR as SPs to enhance Medical Spanish communications skills of US medical students. Through accessible resources and practice opportunities, this initiative enhances the skills of future physicians and ultimately reduces healthcare disparities and cultural barriers among Spanish-speaking patients.
Social Media handle: @bresciani.med on Instagram

La Integración del Español Como Habilidad Profesional y Clínica En Estados Unidos

Gilberto Garcia: he/his

- Lead Teacher / Spanish Program Director
- Language professor
- Texas Tech University HSC El Paso
- *Co-authors:* Daniel Rios-Lopera, Arely Muñoz, Judith Navarro, Jorge Cervantes, Tanis Hogg, Richard Brower, Jose Manuel Delarosa

Judith Navarro: She/her

- Senior Teacher /Spanish Program
- Language professor
- Texas Tech University HSC El Paso

Arely Muñoz: She/Her

- Senior Teacher
- Language Professor
- Texas Tech University HSC El Paso

Abstracto: Durante los últimos años, las escuelas de medicina han enfrentado el reto de atender una población de pacientes de ascendencia hispana. Para mejorar esta realidad, un gran número de escuelas de medicina a lo largo de Estados Unidos han incorporado el español como curso optativo con el fin de que sea parte de las habilidades que tienen que obtener y desarrollar antes de ingresar al servicio en hospitales (Ortega, Francone et al. 2021). Sin embargo, una escuela de medicina ubicada en un contexto fronterizo entre Estados Unidos y México ha incorporado de manera obligatoria cursar español durante los dos primeros años de educación con el fin de impactar a la alta demanda de atender a los pacientes en español en contextos clínicos y prevenir errores clínicos (Ortega, Perez et al. 2019). El propósito de este trabajo es doble: (1) establecer evidencia de cómo una escuela de medicina incorpora el uso de español de manera obligatoria y (2) describir enfoques de instrucción y procesos de ubicación para estudiantes con diversas habilidades y proficiencia lingüística. Los estudiantes muestran un progreso en sus habilidades lingüísticas a partir de la comparación de los resultados entre los exámenes de ubicación como de salida dentro del programa de español. Además de que han reportado que los cursos de español los preparan para comunicarse de una manera afectiva y efectiva con los pacientes de habla hispana. Además, los resultados. Este programa curricular puede servir para informar a otras escuelas que quieran desarrollar iniciativas para la incorporación del español.

Palabras claves: habilidad clínica, español, profesionalización, instrucción, proficiencia lingüística, medicina

No Medical School? No teaching hospital? How to connect your Medical Spanish undergraduate students to the profession.

Paloma Moscardó Vallés

- Language professor
- Princeton University

Background:

The Spanish and Portuguese Department at Princeton University has offered one Medical Spanish course since 2010. A main challenge to keep the success of this course, is to offer an interesting curriculum that will teach the specific contents of a LSP course, but also will provide some connection with the profession even without the resources a medical school with a teaching hospital can offer.

Objectives: The main goal of this course is to improve the interaction of future health professionals with Spanish speakers. This presentation aims to share some strategies that were developed over the years to complement the content of this course and enhance the experience of undergraduate students in institutions without a medical school. Some of them are related to community service and other forms to interact with Latino patients and professionals. Some are pedagogical tools that will serve as models or practical exercises for the students.

Results: Thanks to both informal students' feedback and course evaluations, we can confirm the success of the activities this course offers. Continued contact with former students in Medical School is also testimony of their interest in learning more Medical Spanish after the undergraduate level.

Conclusions & Impact: Having an introductory course of Medical Spanish at the undergraduate level can inspire students to continue their training in Medical School. Therefore, it is very important to show the importance of certain topics at this level and find ways to put the students in contact with the real world. Guest speakers working with Latino patients are better suited to talk about the challenges and opportunities that the future will offer to our students. Being able to interact with real patients and shadow doctors, observe professional interventions in clinics, screenings etc. can have a great impact in the students. And lastly, since some institutions don't have access to standardized patients, the videos of mock medical interviews can be a great pedagogical tool where students can see native speakers interact in a very realistic medical interview setting.

Round 4 - Medical Spanish Oral Presentation Lightning Rounds

HABLAMoS: A Medical Spanish Program with a Social Justice and Health Equity Orientation

Ann Cheney

- Associate Professor
- Faculty in medical school
- University of California Riverside
- *Co-authors:* Evelyn Vázquez, PhD, MS

Background: As the Spanish-speaking patient population increases, there is a growing need for culturally and linguistically competent Spanish-speaking physicians to treat this patient population. Medical schools across the nation have begun to address this need by implementing medical Spanish curriculum in undergraduate medical education. Our presentation reports on a study of a designated emphasis medical Spanish program, Hispanic and Bilingual Longitudinal Ambulatory Medical Studies (HABLAMoS), at the University of California Riverside. The program focuses on experiential learning employing a health equity and social justice lens to curriculum development.

Objective: The goal of this study was to characterize medical students engaged in Spanish-language learning and show how experiential learning opportunities deepen understanding of social justice and health equity in the care and treatment of Spanish-speaking patients.

Methods: Surveys with closed ended questions and in-depth interviews with 33 medical students enrolled in the HABLAMoS program were conducted.

Results: Medical students in the program were primarily from underrepresented and vulnerable communities, including 12.1% who identified as Black and 12% Latinx, 45.4% from underrepresented or vulnerable communities, 24.2% were English as second language learners and 60.6% spoke non-English with their family. Most planned to practice general medicine, pediatrics, or surgery in government-funded healthcare systems (e.g., federally qualified healthcare centers) and treatment immigrant limited English proficient patients. Third- and fourth-year medical students had stronger understandings of health equity and social justice concepts and were more likely than first- and second-year students to understand the role of structural factors (systemic processes, racism) in health disparities.

Conclusions & Impact: Medical Spanish education programs in undergraduate medical education are critical to addressing health disparities in Spanish-speaking patient populations and mission-critical and integral to medical education intended to address local and regional healthcare needs.

Medical Spanish Elective at Marian University, College of Osteopathic Medicine

Annabel Vila

- MD; Associate Professor of Pathology
- Medical Doctor; Academic Physician : Associate Professor of Pathology
- Marian University College of Osteopathic Medicine
- *Co-authors:* Carla Castaño, Ph.D. Associate Professor of Spanish; Luke Nelligan DO. Assistant Professor of Family Medicine

Background: A culturally sensitive physician starts with the recognition of the similarities and differences among cultures and backgrounds; understands and values those differences and what they mean; being able to overcome them with empathy and joy is one of the fundamental pillars to promote and provide healthcare. This physician will be able to address growing diversity and persistent disparities to promote health and mental health equity; according to the 2015 American community survey, there are 40 million Spanish-speaking Hispanics/Latinos, and of these 17.2 million are monolingual Spanish speakers.

A very well-recognized national initiative to overcome these disparities is the National Association of Medical Spanish (NAMS). Its' main goal is to create a standardized evidence-based approach to teaching medical Spanish as well as promoting and assessing bilingualism among medical providers in the United States.

The medical Spanish Elective at Marian University, College of Osteopathic Medicine (MU-COM) was inspired by and followed the standardized curriculum that NAMS developed; however, the curriculum reflects the needs and uniqueness of our Osteopathic Principles and integrates outreach/medical mission trips, international medical professionals and community leaders and other local community outreach opportunities.

Method, Results: This elective has been successfully offered and evaluated by Faculty and Students at MUCOM for a second consecutive year (Spring 2022 and 2023). In the latter course, our school was invited by NAMS and joined as a study site in its national study; a multi-site longitudinal prospective observational cohort study with the aim to evaluate a Medical Spanish course conducted as part of normal medical education at a nationally representative sample of medical schools.

Three (3) surveys were done; a pre- and post-questionnaire for students, and a post-course questionnaire for the faculty who teaches the course.

Conclusions

Particularly interesting and additive to the literature is the uniqueness of our course to explore what elements were different in osteopathic medicine that should be taught in medical Spanish courses in DO schools.



Translanguaging in Medical Spanish Training Encounters

Maya Osman-Krinsky: they/them

- MPH
- Graduate student
- MPH conferred May 2023, Columbia Mailman School of Public Health
- *Co-Authors:* Dr. Lisa Diamond, MD; Dr. Pilar Ortega, MD; Javier Gonzales, MFA

Background/Objectives: Limited-English proficient (LEP) patients have lower rates of stable primary and preventative care use and outcomes when compared to English-proficient patient populations. LEP patients report more dissatisfaction and communication concerns compared to LEP patients with language-concordant clinicians. The majority of limited English proficient (LEP) patients in the United States, both foreign-born and native, are Spanish-speaking; Spanish is the most prevalent language other than English (LOTE) used by United States physicians. This study aims to understand how heritage Spanish-speaking medical students translanguage in Spanish language-concordant patient encounters. Translanguaging refers to how multilingual people make meaning in real-time using a variety of linguistic practices that emphasize the interplay of linguistic, emotional, and cultural modes. How does translanguaging manifest in medical Spanish training encounters? How can features of translanguaging be identified and classified? What is the relationship between translanguaging and Spanish proficiency scoring in medical Spanish training encounters?

Methods: Using video-recorded encounters from a parent study, "Development of a Tool to Assess Medical Oral Language Proficiency", a schema was developed to describe translanguaging practice for heritage Spanish-speaking medical students. The videos were watched, coded for translanguaging moments, and analyzed to discern relationships between translanguaging and Spanish proficiency based on the Physician Oral Language Observation Matrix (POLOM).

Results: Translanguaging manifested as four strategies: establishing rapport, explaining jargon, communicating nonverbally, and using Spanglish. There appeared to be a positive association between a student's POLOM score and establishing rapport, explaining jargon, and/or communicating nonverbally. Conversely, using Spanglish was observed to have a negative association with a student's POLOM score.

Conclusions/Implications: Implementing translanguaging-oriented strategies in medical Spanish instruction for students caring for LEP patients may improve medical language pedagogy. Practicing translanguaging in medical Spanish courses under the instruction of clinicians who are themselves experienced in translanguaging may help students refine their linguistic capabilities to better care for LEP patients. Focusing on heritage Spanish speakers can open possibilities for experiential learning with the surrounding community while simultaneously enriching the students' understanding of how their multilingual languaging practices differ from those of L2 students, underscoring the fact that one type of medical language training does not fit all.

NAMS POSTER PRESENTATIONS



NAMS POSTER PRESENTATIONS

(in alphabetical order by presenter last name)

Evaluation of Interpreter Training Module for Medical Students at the University of Miami



Erin Albertini: she/her/hers

- Co-Chair, SIMPATICA Medical Spanish Project, University of Miami Miller School of Medicine
- MD/MPH Student, Class of 2025
- University of Miami Miller School of Medicine
- Co-authors: Erin Albertini- Co-Chair, SIMPATICA Medical Spanish Project
Elise Edwards- Executive Board, SIMPATICA Medical Spanish Project
Hannah Walsh- Co-Chair, SIMPATICA Medical Spanish Project
Osvaldo Nunez- Executive Board, SIMPATICA Medical Spanish Project
Juwon Lee- Executive Board, SIMPATICA Medical Spanish Project
Raphael Lee- Executive Board, SIMPATICA Medical Spanish Project
Gretel Carmentate MD- Faculty Advisor, SIMPATICA Medical Spanish Project

Background: Language concordance is critical to optimize care for the booming Hispanic population, including Miami-Dade County, where 66.74% of the population primarily speak Spanish. For health practitioners, using medical interpreters is a crucial tool for communication with patients with Non-English Language Preference (NELP). However, not all medical schools train students on interpreter use and its importance in patient care.

Objectives: To understand medical students' knowledge of interpreter utilization and determine the impact of interpreter training on their comprehension and confidence of the use of medical interpreters.

Methods: Three classes of medical students at the University of Miami were recruited. First, they completed an anonymous survey asking about prior interpreter experience and proper interpreter usage using a Likert scale. Next, participants watched an educational interpreter training video. Lastly, participants re-submitted answers to the same survey. Likert scale questions were grouped into 3 categories for analysis; understanding the use of interpreters, confidence in using interpreters, and perceived importance of interpreter training. Statistical analysis was conducted using paired samples t-tests and a p-value <0.05 was considered significant.

Results: 22 medical students completed the training and both surveys. 68.2% had used an interpreter before in a medical setting and 27.3% had received prior training on interpreter use. The combined question scores for the Understanding, Confidence, and Importance categories after completing the interpreter training module (respectively, M = 4.78, SD = 0.25; M = 4.48, SD = 0.44; M = 4.64, SD = 0.49) were significantly higher than before completing the module (respectively, M = 4.30, SD = 0.39, p = < 0.001; M = 3.37, SD = 0.58, p = < 0.001; M = 4.27, SD = 0.70, p = 0.008).

Conclusion & Impact: For patients with NELP, the use of interpreters can enhance patient safety, comfort, and compliance with health guidance, and strengthen trust between patient and provider. Receiving training on the use of medical interpreters increases medical students' understanding of interpreter use and its impact on patient health outcomes. Development of such training has potential to promote empathy and positive future provider-patient relationships.

The impact of linguistic, cultural, and educational concordance in patient-physician communication: perspectives of the orthopedic patient

Yvon Bogdonoff

- Medical Student
- University of Illinois College of Medicine
- *Co-authors:* Sara Izquiero, Alondra Diaz

Background: Patient satisfaction is a crucial aspect of healthcare delivery, as it reflects the quality of care provided and influences patient outcomes. In this study, we aimed to explore the associations between race, satisfaction, language, and culture among adult patients attending an urban university-based orthopedic clinic. The demographics of patient populations in healthcare settings have become increasingly diverse, presenting unique challenges for healthcare providers. Racial and ethnic disparities have been documented in various aspects of healthcare, including access to care, treatment outcomes, and patient satisfaction. By conducting this study, we aimed to fill this knowledge gap and highlight the importance of clinician language proficiency, particularly in Spanish speaking healthcare providers. By examining these factors, we sought to identify potential disparities and areas for improvement in the delivery of orthopedic care.

Methods: 394 adult patients from an urban university-based orthopaedic clinic were administered a Likert-style survey about patient satisfaction, culture, and English proficiency. Analysis of variance, Welch's t-test, and logistic regression analyses were used to determine strength of association between race, satisfaction, language, and culture.

Results: Patient population consisted of 139 males (35%) and 254 females (65%) with the majority identifying as African-American/Black (50%) or Hispanic/Latino (30%) (Table 1). Hispanic patients reported a lower English language proficiency ($p < 0.05$) (Figure 1) and a lower ability to communicate with their surgeon ($p < 0.05$) which was negatively associated with education attainment ($p < 0.001$) (Figures 2 & 3). African-American and Hispanic patients placed greater importance on orthopaedic surgeons understanding their culture than Caucasian patients ($p < 0.001$).

Conclusion: Patients with lower educational attainment and limited English proficiency may face challenges in accessing high-quality care. It is important to recognize the significance of cultural understanding in healthcare delivery, as evidenced by the emphasis placed by Hispanic patients on their orthopedic surgeon's familiarity with their culture. To improve the care of minority patients in urban settings, efforts should be made to enhance diversity among orthopedic physicians and promote cultural competency within the orthopedic community. These measures are crucial for optimizing healthcare outcomes and ensuring equitable treatment for all patients, regardless of their background or ethnicity.

William Cano

- Director, Pain Medicine Division, PMSI
- Partner and Board Member
- Pottstown Medical Specialists, Inc.
- Board Certified, Pain Medicine and PM&R

Background: When providers and patients speak different languages there is a higher propensity for medical errors.

When a Spanish-speaking patient speaks very limited English it can be worse than no English at all because staff may assume comprehension and not request a translator.

Allergy to iodinated contrast is common and potentially lethal if unrecognized in a surgical setting.

Objective: We present a case of a Puerto Rican female patient who had a very limited understanding of the English language and was extremely allergic to shellfish. Her inability to vocalize her contrast allergy could have resulted in a severe anaphylactic reaction in the operating room if the author, a bilingual provider, hadn't been present.

Case Report: J.L.F., a 35 y/o female from Puerto Rico who had recently moved to the U.S., was admitted to the preop area of a private surgical hospital in Wyomissing, Pennsylvania in the Spring of 2023. Her ability to speak English was very limited and her understanding of English was poor. The preop nurses, who did not speak Spanish, were able to complete the preop paperwork by asking questions through a combination of a few common Spanish words, some English and hand gestures. When asked if "allergic to contrast" the patient said "no". This was recorded as "no allergy to iodinated contrast". When the physician met with the patient, he asked (in English) if she was allergic to contrast and she again answered no. Due to the seriousness of the potential complication, the physician asked the same question in Spanish and specifically if she was "allergic to iodine or shellfish" to which the patient answered: "si, muy alergica al pescado y al marisco. Casi me muero cuando era chica". She explained that she had a severe anaphylactic reaction to fish when she was young requiring epinephrine and intubation. All iodinated contrast was removed from the operating room and the patient underwent the surgical procedure without complications.

Conclusions & Impact: A bilingual provider prevented a potentially catastrophic complication. Translators are not always called by nursing staff. More bilingual physicians are needed.

Interlingual: Volunteers Bridging Language Barriers in Healthcare Settings to Improve Health Equity for LEP Individuals



Harrison Chiu: he / him / his

Director & Co-Founder

Medical student 3rd year

New Jersey Medical School

Co-Authors: Arleen Lopez BA, Reyna Moreira-Trochez MS, Katherine Chavarria BS



Reyna Moreira-Trochez: She / Her / Hers

Director, Co-Founder of Interlingual

MS in Biomedical Sciences

Background: More than 70% of providers have no language access plan or use non-ideal methods (family members, non-trained bilingual staff). Language barriers impact patient care and outcomes, resulting in health disparities among the LEP population. Interlingual is a 501c3 non-profit organization addressing language discordance in clinical settings through volunteer interpretation, education, and advocacy.

Objective(s): Interlingual aims to improve healthcare (remove barriers) for LEP individuals by integrating live interpretation services and enhancing cultural competency within healthcare systems. The organization seeks to recruit, train, and sustain a team of volunteer undergraduate ad hoc interpreters with language proficiency, leveraging the interest of pre-health students and the language skills of the community.

Methods: Interlingual will recruit and train pre-health students with native or inherited language proficiency to serve as volunteer interpreters in clinical settings. The organization will leverage students' existing interest and language skills to build a diverse and dedicated volunteer base that matches the language needs of the community. Collaborating with certified interpreters, Interlingual will develop a comprehensive health curriculum to provide training for volunteers without prior interpretation experience. Intrinsic and extrinsic volunteer engagement mechanisms, including team building within the context of our mission, hour logging, and stipend incentives will sustain the commitment of volunteer interpreters.

Results: Interlingual is facilitating a partnership between Lives in Translation (LiT), a sister non-profit with an existing interpretation internship model, and University Hospital (UH) of Newark, a community non-profit teaching hospital affiliated with New Jersey Medical School. LiT will be piloting their live, clinical interpretation internship positions with UH this upcoming Fall semester. Simultaneously, Interlingual will train volunteers for non-clinical roles, such as patient navigation and education. Interlingual aims to pilot live volunteer interpreters to support handoffs and discharge instructions in October to improve communication and patient care.

Conclusions & Impact: Interlingual aims to bridge language barriers, improve healthcare experiences, and reduce health disparities for LEP individuals to create a more inclusive and equitable healthcare environment. Metrics include volume of services provided, Likert scales of patient satisfaction and perceived value, and qualitative provider feedback.

Understanding Linguistic Diversity in the Dermatology Workforce and Requirements to Provide Medical Care in a Non-English Language.

Marco Constanza

- 4rd year Medical student
- University of Michigan Medical School
- *Co-authors:* Torres, Alma, MD; Costanza, Marco BS; Batra, Peter MA; Castanedo-Tardan, Mari Paz, MD

Background: Language-concordant care has been associated with increased patient trust, adherence, and improved health outcomes, especially among Latinx patients. Furthermore, research highlights the usage of medical interpreters as inferior to language-concordant provider-patient relationships. But, given the lack of diversity among physicians in dermatology, LEP patients are less likely to receive language-concordant care and experience poorer health outcomes. This may greatly affect Latinx patients who constitute 18% of the U.S population, but only 6% of the physician workforce.

Objectives: Our study aims to assess the landscape in which dermatologists provide non-English care and any potential barriers that may contribute to LEP patient's decreased likelihood of receiving language concordant care.

Methods: An anonymous survey was distributed to dermatologists and dermatology residents (N=127) and a cross-sectional analysis was conducted. The survey aimed to evaluate the prevalence of multilingual dermatologists, the languages they spoke, and the extent to which these languages were utilized in medical care. Barriers hindering language-concordant care were also explored.

Results: Findings indicated that 63% of dermatologists surveyed speak at least one non-English language, with 25 languages represented. However, only 15 of the 25 spoken languages were utilized in medical care and only 45% of those multilingual dermatologists practice without interpreters. Thus, there is a significant number of multilingual dermatologists, especially Latinx dermatologists who represent 15% of our sample, who could potentially provide language-concordant care. However, when asked about barriers to doing so, nearly half of dermatologists reported uncertainty regarding Institutional and fluency-assessment requirements.

Conclusions & Impact: Our study highlights the under-recognized potential for the existing dermatology workforce to provide language-concordant care to LEP and/or Latinx patients. Standardizing the requirements to provide non-English medical care without interpreters is crucial to address the current lack of uniformity in protocols for providing non-English medical care and could increase access and quality for linguistically diverse patient populations. While our findings are limited by a small sample size and an anonymous survey and potential response bias, future research utilizing mixed methodologies and larger sample sizes could provide further insights.

Addressing the Communication Gap: A Practical Medical Spanish Curriculum for Healthcare Students



David Essex

- Medical Student (Class of 2026)
- University of Texas Medical Branch John Sealy School of Medicine
- Co-authors: Daniela Kerguelen Murcia, Samir Cayenne, Natalia Penaloza.

Trevor Murphy

- Medical Student (Class of 2026)
- University of Texas Medical Branch School John Sealy School of Medicine

Isaac Gamez

- Medical Student (Class of 2026)
- University of Texas Medical Branch School John Sealy School of Medicine

Ugonne Etufugh

- Medical Student (Class of 2026)
- University of Texas Medical Branch School John Sealy School of Medicine

Background: With a growing number of Spanish-speaking patients in the US, it is crucial for physicians to be able to communicate effectively with their patients. However, the number of Spanish-speaking doctors is disproportionately low.

Objective(s): Our project aims to provide medical students with a foundation of Spanish grammar and practical experience in conducting patient interviews with the goal of bridging this communication gap. Our student-led program meets in-person weekly and is composed of first and second-year medical students. Our meetings consist of a didactic portion followed by team-based learning activities led by bilingual student mentors with each session focusing on a portion of the patient interview.

Methods: A paired t-test was conducted to examine the impact of the course on students' proficiency in various aspects of medical Spanish. A group of 30 students completed a voluntary anonymous pre-course survey online assessing their comfort levels in varying areas, such as non-medical Spanish communication, basic Spanish grammar, Hispanic cultural issues, patient introductions, taking vitals, eliciting a chief complaint, and obtaining a past medical history (PMH). At the end of the course, 17 out of the 30 students participated in a voluntary anonymous post-course survey online. The paired t-test revealed statistically significant improvements in several measured categories ($p < 0.05$ represented statistical significance).

Results: The mean scores from pre-course to post-course surveys were measured in the following categories: non-medical Spanish communication ($p=0.07$), basic Spanish grammar ($p < 0.05$), Hispanic cultural issues ($p=0.07$), patient introduction ($p < 0.05$), taking vitals ($p < 0.05$), eliciting a chief complaint ($p < 0.05$), and obtaining a PMH ($p=0.82$).

These findings indicate that the course effectively enhanced students' comfort levels and proficiency in assessed areas of grammar, patient introduction, vitals assessment, and eliciting chief complaints. We intend to conduct trials with an increased sample size in the future.

Conclusion and Impact: Overall, this program provided a safe environment for medical students to effectively learn and practice medical Spanish. We look forward to utilizing the feedback to improve the curriculum and ensure medical students have access to comprehensive resources to continue addressing the needs of communicating with Spanish-speaking patients.

Permanent Email Address: tlmurphy@utmb.edu



Needs assessment of Spanish Language communication of Dermatology resident physicians in California

Aldana Garcia: she/her/hers.

Medical student

Michigan State University College of Human Medicine, Grand Rapids, MI; University of Illinois College of Medicine, Chicago, Illinois

Co-authors: Pilar Ortega, MD

Background: By 2021, the Hispanic/Latinx population in the US was approximately 62.6 million, comprising 19% of the US's population (Lopez MH, Krogstad JM, Passel JS.). The increasingly diverse patient population and increase in Hispanic/Latinx population in the US warrants the need for standardized medical Spanish education within US medical schools and residency programs. In 2021, California's Hispanic/Latinx population was 15.8 million, making it the largest racial or ethnic group in the state (Krogstad JM, Passel JS, Noe-Bustamante L.). When discussing different specialties, dermatology is the second least diverse medical specialty following orthopaedic surgery. The lack of diversity within dermatology warrants the need for an assessment of the linguistic and cultural needs within dermatology to better serve patients who prefer to communicate in Spanish. Given the large Hispanic/Latinx community in California, the purpose of this study is to assess the self-reported Spanish proficiency and perceived Spanish educational needs as related to patient care among dermatology resident physicians in the state of California.



Characterizing Healthcare Workers Ad-hoc Interpreter Usage and Barriers to Professional Interpreters for Hospitalized Limited English Proficiency Patients

Joselyn Hernandez: She/Her/Hers

3rd year MD/MPH Student

McGovern Medical School; UTHealth Houston School of Public Health

Co-authors: Raymond Parlar-Chun, MD; Reynaldo Romero, PhD, MPH

Background: The underuse of professional interpreters is an obstacle in attaining equitable healthcare for patients with Limited English Proficiency (LEP). Healthcare workers may experience barriers limiting the use of professional interpreters (PI).

Objective: To characterize healthcare workers that utilize ad-hoc interpreters (AHI), describe barriers to professional interpreter services, and elicit reasons for usage of AHI.

Methods: A survey was disseminated to pediatric physicians and nurses working at an urban tertiary care pediatric hospital. Questions included characteristics of respondents including frequency of interactions with LEP patients and speaking another language. Primary outcome was the self-reported percentage of LEP encounters using AHI. Other questions included encountered barriers with interpreter services, usage of AHIs. Open ended questions asking how interpreter services could be improved, and when AHIs were used allowed for qualitative analysis. Other analysis included descriptive statistics and t-tests for comparison testing.

Results: 99 responses (52 MDs, 42 RNs, 5 RTs) were obtained with a response rate of ~41%. The majority of LEP encounters utilized professional interpreters (81%). Healthcare workers that spoke another language were more likely to utilize AHIs and 83% of respondents had utilized AHIs most often being nurses (71%), residents (57%), and the other parent (52%). The most common reason not to utilize a PI was the presence of a bilingual co-worker (67%). The most common theme for AHI use were for short or non-medical conversation (53%). The most common barrier encountered for virtual and in-person interpreters were connection issues (85%) and taking too long to arrive (45%), respectively. Increasing interpreter availability was the most common theme to improve interpreter services overall (65%).

Conclusion: We find 1 in 5 encounters with LEP patients are done without professional interpreting services. Healthcare workers that spoke another language were more likely to utilize AHIs, perhaps reflecting enough familiarity with the language to perceive not needing a professional interpreter. Future studies should focus on interventions aimed to reduce these barriers while increasing the availability of professional interpreters.



Advancing Language-Appropriate Healthcare Education: A MedEdPORTAL Collection to Foster Equitable Clinical Communication and Address Health Inequities

Pilar Ortega, MD, MGM

- Vice President of Diversity, Equity, and Inclusion, ACGME
- Accreditation Council for Graduate Medical Education

Background: Language is a fundamental tool in healthcare, shaping the interactions between clinicians, patients, and communities. The complexities of language identities and linguistic practices intertwine with various marginalized characteristics such as race, ethnicity, culture, nationality, ancestry, and immigration stories. Patients with non-English language preferences (NELP) often experience health inequities, including poorer clinical outcomes and reduced satisfaction with care compared to English-speaking patients. In addition, the conventional use of language in healthcare communication may not effectively serve patients with sensory or cognitive impairments. Despite the known benefits, there is a paucity of curricula that equip students and practitioners with the skills to provide equitable, patient-centered, language-appropriate care.

Objectives: This collection aims to provide educators with practice-based, peer-reviewed resources to teach language-concordant clinical and communication skills, clinical strategies for patients with sensory or cognitive impairments, and knowledge and skills for collaborating with interpreters and healthcare team members to enhance language-appropriate care. Additionally, the collection aims to promote educational scholarship and foster a collaborative community dedicated to improving medical education curricula in this area.

Methods: The resources included in this collection are practice-based and peer-reviewed. They focus on teaching language-concordant clinical and communication skills for specific populations with NELP, addressing conditions affecting sensory or cognitive function, and facilitating collaboration with interpreters and healthcare team members.

Results: The collection offers a range of resources for educators, including interventions targeting specific languages (e.g., medical Spanish) and medical language educational interventions. It also provides strategies for effective communication with patients with sensory or cognitive impairments and guidance on collaborating with interpreters and healthcare team members. By accessing these resources, educators can enhance their teaching approaches and contribute to improving language-appropriate healthcare curricula.

Conclusions/Impact: This MedEdPORTAL collection fills a gap by offering educators practice-based, peer-reviewed resources to teach language-concordant clinical and communication skills, strategies for patients with sensory or cognitive impairments, and knowledge for collaborating with interpreters and healthcare team members. By promoting educational scholarship and facilitating collaboration, this collection aims to advance the field of language-appropriate health care and improve medical education curricula in this area.



Differences in Narrative Memory for Cross-Lingual Processing in Spanish-English Bilinguals

Veronica Foureaux Lee: she/her

- Undergraduate Researcher
- Washington University in St. Louis
- *Co-authors:* Angelique Delarazan, Dr. Zachariah Reagh

Background: The context in which one learns information is important to the ability to remember it— this is known as “encoding specificity”. Encoding specificity is relevant to remembering both rote knowledge (semantic memory) and past experiences (episodic memory). For multilinguals, the language one uses to encode and remember information provides an important source of context. However, the research on the contextual influence of language is limited.

Objectives: This study examines language-dependent effects on narrative memory, as well as if/how such effects change with consolidation over a 24-hour period.

Methods: To investigate this, participants listen to eight stories in two equivalent blocks— two in English and two in Spanish for each. During listening, only the title of the story and a relevant image appear on the screen. They are then asked to recall the stories in a designated language, matching the language of encoding or not, at an interval of 24 hours or immediately post-encoding. Participants are prompted only with the title of the story and the corresponding image. To carry out additional analyses of how language-dependent memory effects might be modulated by factors that contribute to L1 and L2 proficiency, participants will complete the LEAP-Q language inventory at the beginning of the experiment.

Results: Preliminary results ($N = 10$) show a significant interaction between language of recall and interval condition such that participants had greater recall strength in English than in Spanish, but only after a 24-hour delay ($F(1,1) = 4.21, p = 0.04$). This was the case regardless of the language in which the story was encoded ($F(1,1) = 0.55, p = 0.46$). Surprisingly, language congruency between encoding and recall had no effect on recall strength ($F(1,1) = 0.06, p = 0.81$), and neither did interval condition ($F(1,1) = 2.69, p = 0.10$).

Conclusions: These results suggest that the mechanisms at play during encoding and recall may differ in their language dependency. While participants’ recall strength does not appear to be associated with the language of encoding, there is a bias when it comes to the language of recall. Furthermore, although preliminary results do not give a clear picture on the effects of language congruency and recall interval, additional data from a larger sample size may provide more insight. It will be important to carry out further analyses of the data to investigate the effects of language dominance and language exposure on recall performance, which will shed light on how this information can best be utilized to support language access in different linguistic contexts. The findings of this study may help providers and patients to understand the ways in which this gap may affect the healthcare experience and reaffirming the importance of language access in healthcare settings.

Medical Students as Standardized patients: A Case for Improving Empathy in the Delivery of Bad News in Spanish

Alejandra Patino: She/Her

- MD-PhD Student
- Graduate student
- Duke University
- *Co-authors:* Carmen Rauh, Leonor Corsino, Liza Genao

Background: Despite increased investment in medical Spanish courses, the limited availability of Spanish-speaking standardized patients (SPs) hinders the implementation of clinical simulations. SPs are essential to develop various student competencies, including Spanish Speaking communications skills and empathy.

Objective: To test the feasibility, acceptability, and impact of training first-year Medical Spanish students at Duke University, to serve as SPs for their classmates.

Method: We created an SP patient encounter with the learning goal of understanding the delivery and receipt of 'bad news.' Students (n=18) were randomly paired and assigned the roles of "provider" or "patient" using a random number generator. One week before the simulated encounter, we held a training session with the "SP-student" group where we reviewed the goals and expectations of their roles and practiced the script. We asked students not to discuss the case details with assigned "provider-students" to maintain case integrity. We used two versions of anonymous electronic surveys for SP and provider students. We assessed comfort in serving as SPs, empathy for patients and providers, and confidence in delivering bad news in Spanish.

Results: 9/9 students felt comfortable serving as an SP, but 2/9 (22%) felt uncomfortable being interviewed by a peer. 77% of SP students reported that the role increased their empathy for Spanish Speaking patients and providers. All SP students agreed that receiving bad news in a "patient" role gave them a better sense of how to deliver bad news as a provider. Regarding the efficacy of this model, 8/9 (89%) of "provider-students" agreed that their confidence in delivering bad news increased after the case.

Conclusions: This study suggests that using medical students actively enrolled in medical Spanish courses as SPs can be a feasible and effective model for clinical simulations when Spanish-speaking SPs are unavailable. While not directly practicing clinical skills, serving as "patients" increased empathy and provided perspective on delivering bad news to patients. Still, provider students reported improved empathy and comfort in delivering bad news in Spanish. This model can be replicated to practice and acquire other competencies in the training for becoming a culturally competent Spanish-speaking provider.

Bilingual Fluency Assessment Certification Program - a pilot program for medical students in New York



Rishab Revankar

- Bilingual Fluency Assessment Program Founder
- Medical student
- Icahn School of Medicine at Mount Sinai
- Co-authors: Nestor Bedoya, BS, Icahn School of Medicine at Mount Sinai;

Rodnell Busigo-Torres,

- BS, Icahn School of Medicine at Mount Sinai;



Adriana Baez Berrios

- BS, Icahn School of Medicine at Mount Sinai

Background: With a growing population of patients in New York City who speak Spanish as a first language, the need for bilingual physicians who can better connect with and care for patients is significant. Based on an institution-wide survey, medical students at Icahn School of Medicine at Mount Sinai reported high levels of interest in pursuing advanced language proficiency training. Most nationally accredited interpreter courses reported costs that were prohibitive to medical students.

Objective(s): To design a fully-funded bilingual fluency accreditation program for Mount Sinai medical students in collaboration with the Department of Medical Education. To evaluate the ability of said course to fulfill basic core competencies required of bilingual physicians.

Method: We created a 6-week, 30-hour curriculum for bilingual fluency certification in collaboration with the Department of Medical Education and Primera Medicina, a language education provider. The program was reviewed and approved by the Department of Language Services at Mount Sinai.

The program was administered live online via Zoom to a pilot cohort of 8 medical students. Certification was dependent upon course attendance and performance on the final examination. Pre- and post-course surveys were provided to participants to assess self-perceived levels of language proficiency. No identifying information was collected.

Results (Case description for case reports): Pending summer project outcomes. Outcomes expected:

- Number of participants completing pre- and post-surveys
- Participant demographics
- Level of self-perceived language proficiency in medical and non-medical setting (pre- vs. post-course)
- Level of importance for integrating language proficiency in future medical career goals (pre- vs. post-course)
- Ability of the course to effectively address core competencies expected of bilingual clinicians
- Effectiveness of the virtual platform

Conclusions & Impact: Our language accreditation program addressed a need in both medical student education and in effective patient care. It is aligned with Mount Sinai's commitment to providing anti-racist medical care. We hope the pending survey data reflects the impact of our accreditation program. Mount Sinai's Department of Medical Education is committed to the objectives of this program and has agreed to provide funding for additional iterations.

Spanish in Healthcare: Strategies and Lessons from a College Instructor

Claudia Sokol: She/Her/Hers

- Associate Teaching Professor
- Language professor. Medical Doctor
- Northeastern University

The proposed presentation is an unpublished paper narrating my experience building an Advanced Spanish for Health Care Professionals course with authentic materials. The course, prepared for Northeastern University's World Language Center and tailored for Spanish majors, was built and created by Professor Claudia Sokol, M.D.

This course is the first in a series of courses that the WLC is aiming to offer students interested in the combination of Health Sciences and Spanish Language.

The relationship between medical sciences and Spanish is of utmost importance and demonstrates the power of language as a vehicle for communication. The beauty of this class is its flexibility. Assessment is project-based, some examples being the creation of a clinical history and narrating a physical exam. Recent events and cultural components ensure that students are cognizant of the culture beyond the clinic or the hospital. Lessons take into account not only alternative medicine, chamanismo, and curanderismo in the Hispanic world, but also the plan of action for doctors navigating complicated situations abroad--that arise, for example, when someone inevitably asks in Spanish "is there a Doctor in the house?"

Language Exchange Pilot Program: Integrating ESL Students into Medical School Spanish Language Curriculum

Carla Wyatt-Ingram

- Medical Student
- University of South Carolina School of Medicine Greenville
- *Co-authors:* Elenia Himmelstein, ESL Instructor. Jessica Himmelstein, MD MPH MSc.

Background: Language barriers have been shown to negatively impact access to health care. Language barriers can be addressed more holistically as social determinants of health by incorporating health related topics into English as a Second Language (ESL) courses to bridge access to care for populations whose preferred language is not English.

Objective(s): To allow ESL students an opportunity to practice their English language skills on topics related to health and engage in health related mock interviews conducted in English.

To allow medical students with various levels of Spanish language expertise an opportunity to practice speaking in Spanish and engage in health related mock interviews conducted in Spanish.

Method: During a 6 week summer program in medical Spanish, rising second year medical students met for 1-hour sessions, two evenings per week. ESL students joined 3 out of the 12 sessions with the goal of engaging in an English and Spanish language exchange. ESL students were joined by their teacher and were guided prior to the language exchange on topics covered in each session. Medical students reviewed medical terminology and a mock interview in Spanish prior to each session.

Results: A total of 5 medical students and 3-4 ESL students participated in the in-person language exchange. ESL students' primary language was Spanish with one ESL student being a primary French speaker. The first session focused on general introductions and sharing of experiences with the healthcare system both in and outside of the United States. The second and third sessions allowed students to practice a mock medical interview which included the History of Present Illness conducted in both English and Spanish.

Conclusions & Impact: Overall, both medical and ESL students found the experience mutually beneficial and of value to their language learning. Challenges included coordination of schedules as well as incorporation of students who were not primary Spanish speakers.



Medical Organization for
Latino Advancement