

# Abstract Supplement



# 2<sup>nd</sup> Annual Scientific Meeting MOLA Latino Health Symposium

October 6<sup>th</sup>, 2018

In partnership with:

M Northwestern Medicine<sup>®</sup>

Feinberg School of Medicine

# Summary

Editorial Committee	.page 3
Editorial	.page 4
Symposium Highlights	.page 5
Oral Presentations	page 7
Posters	page 15
MOLA Awards	page 25
Author Index	page 26

## **Editorial Committee**

#### Pilar Ortega, MD

President
Medical Organization for Latino Advancement (MOLA)

Clyde W. Yancy, MD, MSc, MACC, FAHA, MACP, FHFSA Vice Dean, Diversity and Inclusion Northwestern University Feinberg School of Medicine

### Scientific Committee (in alphabetical order)

Isabel Castrejón, MD, PhD – Co-Chair, Academic Programming MOLA, Division of Rheumatology Rush University Medical Center

**Emanuel Eguía, MD** - MOLA Member, Loyola Stritch University School of Medicine

Joaquín Estrada, MD – Vice-President, MOLA, Colon and Rectal Surgery, Advocate Illinois Masonic Medical Center

**Nico Francone, MD-candidate** – Co-Chair, Medical Student Committee, MOLA, Northwestern Feinberg School of Medicine

Jonathan Moreira, MD - Chair, Scholarship Subcommittee, MOLA, Hematology/Oncology, Northwestern Feinberg School of Medicine Pilar Ortega, MD – President, MOLA; Chair Education & Research Committee, Departments of Emergency Medicine and Medical Education, University of Illinois College of Medicine

Mariam Riad, MD – MOLA Member, Division of Rheumatology, Rush University Medical Center

**Toni Riveros, MD** – Resident Physician Board Member, MOLA, Emergency Medicine, Cook County Health and Hospitals System

**Óscar Iván Zambrano, MPH, MBA** – Executive Board Secretary, MOLA, Advocate Aurora Health at Illinois Masonic Medical Center in Chicago

# Editorial

# MOLA's Second Annual Latino Health Symposium: Health-focused Academic Work for Latinos, By Latinos

The Medical Organization for Latino Advancement (MOLA) is proud to disseminate the academic innovative work that is being actively pursued by our members, including physicians, trainees, researchers, public health professionals, and students. MOLA is a non-profit association of Chicagoland Hispanic/Latino physicians working for career advancement, linguistic and cultural competency, personal wellness, and reduced health disparities for the good of the entire Hispanic/Latino community.



Our second annual Latino Health Symposium, executed on October 6, 2018, in partnership with the Northwestern University Feinberg School

of Medicine's Office of Diversity and Inclusion, boasted of an attendance of over 250 health professionals, 34 academic posters, 14 oral presentations, and a rich setting for academic discussion, networking, mentorship, innovation and collaboration.

It is with great *orgullo* (pride) 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 uniquely affect our underserved Hispanic/Latino 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.

We look forward to featuring your work and achievements next year at our next Symposium! To keep uptodate on MOLAs news and announcements, please visit www.chicagomola.com

On behalf of MOLA's Board of Directors and Scientific Committee, we extend a heartfelt *¡Enhorabuena!* (Congratulations!) to all of 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!

Pilar Ortega, MD President Medical Organization for Latino Advancement

# Symposium Highlights



"Excellent quality speakers. High degree of professionalism and valued the effort to have a diverse set of topics, speakers, institutions, gender, and nationalities represented"

"Through this symposium, I learned the limitless possibilities for mentorship, as well as guidance when exploring research opportunities. It was really important for me to realize how much support there is for me as a Latina student"



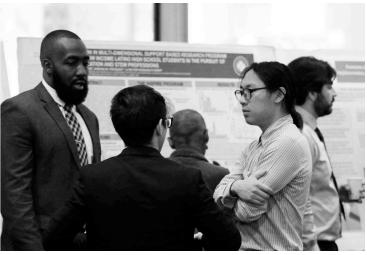


"Great presentations in a very diverse range of topics"



"I will be able to better relate and understand the Hispanic communities in many contexts. In the future, I hope to inform Latino patients of resources that could be beneficial for them, including research."





## **Oral Presentations**

### **Research Projects**

#### **ORAL 01**

Pisando Fuerte: An Evidence-Based Falls Prevention Program for Latino Seniors

M. Mora-Pinzón MD, MS\*, AL-Castro, E. Jacob, S. Ohly, M. Bonet-Vázquez, M. Villa, D. Rodríguez, J. Mahoney. University of Wisconsin, Madison, WI.

**Background:** The population of Hispanic/Latino seniors in the US is increasing dramatically, but there are no evidence-based fall prevention programs for them. We developed a linguistically and culturally appropriate version for Spanish speakers of "Stepping On", which is an evidence-based fall prevention program. The purpose of this study is to describe this program named "Pisando Fuerte".

**Methods:** "Pisando Fuerte" consisted of 2-hour sessions delivered in Spanish over the course of 8 weeks by one healthcare professional, and one "promotora," and was conducted at two community sites in Wisconsin. Over the course of the sessions, participants received information on falls prevention, and practiced balance and strength exercises.

**Results:** 24 individuals were enrolled in two workshops, mean age was 70.5 years; 71% were female and five reported a fall in the year prior to the program, and 87.5% completed the program. The outcomes of the program demonstrated an improvement of the mean Falls Behavioral Risk Scale (FaB) (Baseline=2.69 vs. 6-months Post-intervention= 3.16, p <0.001). We observed a trend to a decrease in the number of falls per person [RR: 0.33 (95%CI: 0.096 - 1.13)]; although this was not statically significant (p=0.08). Most participants indicated that the program had benefits, and 72% shared the information with friends and family. At 6 months, 57.9% of participants continued doing exercises, 94% reported changes in walking and standing, and 67% executed a home safety recommendation. The estimated cost per participant was \$319 approximately, which included training of the leaders. Overall, these results are similar to those described for the English version of the program.

**Discussion:** Our study shows that "Pisando Fuerte" is an effective program to prevent falls among Hispanic/Latino communities, and it provides similar results to "Stepping On". Future research will focus on further packaging for dissemination to Spanish speaking communities.

#### **ORAL 02**

Gender Affecting on Inpatient Mortality in the Latino Hypertensive Population with Concomitant Renal Disease in the United States

R. Aguilar MD, M. Mora-Pinzón\*, C. E. Cervantes, R. Correa, M. Abi Nader. Department of Medicine, Marshall University, Huntington, WV.

**Background:** Hypertension and chronic kidney disease are two of the most important risk factors for cardiovascular disease, a major cause of death in the US population. The impact of gender in this equation remains unclear, more so, on how it affects the Hispanic population. Studies comparing the outcomes and difference in inpatient mortality between male and female with hypertension and CKD are sparse. Our aim was to determine if gender in Latino population affect the inpatient survival rate among hypertensive patients across different CKD stages.

**Methods:** Data was extracted from the 2005 to 2012 Nationwide Inpatient Sample (NIS). Using propensity score matching, female hypertensive with chronic kidney disease (stage 3, 4, 5 or ESRD) patients were matched with hypertensive males at a 1:1 ratio. We compared inpatient mortality, both crude mortality and mortality per CKD stage, length of stay and total hospital charges between male and females. Analyses were performed using SAS version 9.3 (SAS Institute, Cary, NC, USA). **Results:** Among 227,923 hospitalized hypertensive patients, 118,132 (51.83%) were males and 109,791 (48.17%) females. 18.76%, 10.31%, 3.85% and 67.17% were Females with CKD 3 to ESRD respectively. Males across CKD stages 3 to ESRD were 19.47%, 9.54%, 3.63% and 67.43% respectively. In-hospital crude mortality was significantly higher for males compared to group of females before match, (3.89 vs 3.74 p= 0.05), interestingly, mortality was higher after match for females (3.85 vs 3.79 p= 0.48). Mean length of stay for hypertensive females were significantly higher than males, irrespective of CKD stage (6.74 vs 6.70 days, p= 0.001), however at the male group had an expense of higher hospital charges (63,686 vs 61,667 dollars, p= 0.001).

**Discussion:** Latino hypertensive men with any stage of CKD are more at risk of dying then their counterpart women and have higher hospital charges. Further studies are needed to explore these associated genders in difference outcomes in this population.

#### **ORAL 03**

#### The Role of Financial Burden on The Mental Health of Latina Breast Cancer Survivors

**C.** Ávila\*, K. Peña, S. Cardenas, J. Guitelman, B. Mariscal, S. Merlos, Y. Molina-University of Illinois at Chicago, School of Public Health, Chicago, IL.

**Background:** Latina breast cancer survivors (BCS) suffer from poorer quality of life and well-being relative to non-Latina White (NLW) counterparts. Financial burden is associated with decreased quality of life among cancer patients; nonetheless, little is known about financial distress among Latina BCS. To begin to address this gap in the literature, we characterize: 1) impact of financial burden on Latina BCS' mental health/healthcare-seeking behaviors; and, 2) the type of financial burden that Latina BCS experience overall by type of insurance.

**Methods:** Staff from ALAS-Wings and the University of Illinois at Chicago recruited 19 Latina breast cancer patients to participate in two audio-recorded, semi-structured focus groups at community hospitals (9-10 per group). To be eligible to participate, women had to be adult Latinas diagnosed with breast cancer who had undergone a lumpectomy/mastectomy within the past 5 years. Sample questions women answered were: "How have you been able to pay for your medical visits in the past?" Authors then conducted content analysis on the verbatim transcripts.

**Results:** Most respondents did not estimate correctly the costs of cancer care overall. As they began treatment, several respondents reported that costs caused distress/anxiety and was a barrier for seeking treatment. After active treatment, financial stressors persisted for women (e.g., harassment from billing departments with unkind staff, limited understanding of payment plans). Women who were uninsured and women who were well-insured experienced less financial distress compared to women who were underinsured and could not quality for financial assistance.

**Discussion:** Insurance affects the extent of financial burden that Latina BCS's experience and most importantly, is associated with a decreased sense of well-being. Implications for our study are to provide more education overall regarding the cost of cancer as well as navigation and more resources/support concerning financial assistance for Latinas who view cost as a barrier and especially for Latinas with poor quality insurance.

#### **ORAL 04**

### How Does the Social Environment Affect Cultural Misconceptions about Breast Cancer Among Latinas?

**K. Peña\***, L. Diaz, E. Cardoso-Mendoza, L. San Miguel, C. Ferrans, Y. Molina. University of Illinois at Chicago, School of Public Health, Chicago, IL.

**Background:** Latinas have higher rates of late stage breast cancer diagnosis relative to non-Latina Whites. Cultural misconceptions about breast cancer (e.g., risk factors, non-medical options, survivability) contribute to non-adherence to screening guidelines and late stage breast cancer diagnosis. Little is known about how the social environment (e.g., # of people, amount of social support) contributes to Latinas' cultural misconceptions. The size of Latinas' social networks and how much support they receive about health may impact their cultural beliefs in one of two ways: social support can give accurate health information or can provide inaccurate health information. Our study examined the effect of social environment size and amount of support on cultural misconceptions about breast cancer.

**Methods:** Our study includes 109 Chicago-based Latinas who are non-adherent to mammography guidelines. Previously validated survey measures used for this tool were women's perceived health-related social capital and women's cultural misconceptions about breast cancer (Cronbach's alpha = 0.86-0.86). We conducted one multivariable linear regression model adjusting for socioeconomic characteristics (education, income, insurance).

**Results:** Our sample was largely of Mexican descent (92%) and approximately half of them had less than a 9th grade education (58%), had an annual household income of <\$10,000 (45%), and uninsured (57%). After adjusting for education, income, and insurance, the health-related perceived health-related social capital was negatively associated with cultural misconceptions about breast cancer, B = -0.20, p = .05.

**Discussion:** Women who perceived a larger and more supportive social network for health concerns had fewer cultural misconceptions about breast cancer. Our results suggest larger more integrated environments in Chicago exchange more accurate information, resulting in fewer cultural misconceptions among individual women. To address the needs of socially isolated women, we should consider providing health information through public spaces (e.g. schools, churches) and encouraging health-related social networking among socially isolated women.

#### **ORAL 05**

# Thrombolytic Revascularization Rates after Acute Ischemic Stroke in Hispanic Population: A Stroke Center Experience

J. Sleiman\*, E. Munoz, J. Del Cid Fratti, V. E. Prado, M. Salazar, M. J. Seares, Y. K. Ng Wong, J. Rey-Mendoza Department of Medicine, John H. Stroger Jr Hospital, Chicago, IL.

**Background:** Racial disparities exist in tissue plasminogen activator (tPA) administration rates. Particularly, among self-identified Hispanics, lack of early recognition, migratory status, language barrier and social marginality have been shown to place these patients outside the window for thrombolysis.

Aim: To determine the rate of thrombolysis after acute ischemic stroke among Hispanic patients in a large tertiary center.

**Methods:** A retrospective observational analysis was performed of patients with confirmed acute ischemic stroke at John H. Stroger Hospital from January to December 2014. Only patients self-identified as Hispanic were selected. Stroke events were clinically diagnosed by certified stroke physicians in the Neurology Division and confirmed by magnetic resonance or computed tomography. Anti-thrombotic therapy with tPA was given following the latest stroke guidelines from 2014. Qualitative data is presented as percentage, while quantitative data as mean± standard deviation (SD).

**Results:** A total of 92 Hispanic patients with acute ischemic stroke were included in the analysis. The mean age was 57.29 ±15.54 years with male sex predominance (58.69%). Hypertension (71.73%), diabetes (52.17%), smoking history (20.65%) and prior stroke (18.47%) were the most common associated factors. Only one patient (1.08%) met criteria for tPA.

**Conclusion:** In our study, only 1.08% of Hispanic patients received tPA, which is inferior to nationwide rates (3.4-5.2%). This is explained by the delayed presentation of our patients to the Emergency Department. This demands the development of new educational programs in our Hispanic community that allow early recognition of signs and symptoms of stroke, in order to ameliorate health disparities.

#### **ORAL 06**

## Effectiveness of Preventive-Multimodal Analgesia for The Management of Acute Postoperative Pain in an Underserved Latin-American Population

S. Linares Gavidia MD\*, SL Cuadra, Z. Garcia. Universidad Dr. José Matías Delgado, Facultad de Ciencias de la Salud Dr. Luis Edmundo Vásquez

**Background:** Poor controlled pain is associated with longer hospitalization periods and medical complications; besides that, is still highly prevalent in Latin-American, in orthopedic surgery up to 64% of this pain is severe. The preventive-multimodal analgesia consists in the application of simultaneous agents and techniques acting at different mechanisms before the harmful stimulus, improving analgesia and avoiding the sensitization of nervous system. The aim of this study is to determine the effectiveness of multimodal preventive analgesia in the postoperative pain.

Methods: Between 2016 and 2017 was conducted a triple-blinded, randomized, placebo-controlled, phase IV trial with the approval of the institutional ethics committee. 27 patients undergoing lower limb orthopedic-elective surgery were divided into 3 groups. Group M was administered 100mcg/Kg intrathecal morphine before the surgical procedure, Group PM pregabalin 150mg orally two hours previous surgery and intrathecal morphine, group C no received morphine neither

pregabalin, all of three groups underwent regional anesthesia and postoperative analgesia on-demand. The intensity and frequency of pain episodes and the need for rescue medication were assessed.

**Results:** Pain episodes decrease in all groups during the time; however, there was no statistically significant difference between groups. Only groups "PM" and "M" had subjects with no pain. The time of appearance of the first episode of pain in groups "PM" and "M" it was presented in an average of 12 hours, while in the "C Group" the average was 6.5 hours. During the first episode, in Group "C" the severe intensity prevailed (7 points), while in the Groups "PM" and "M" it was moderate (4.6 and 4.1 respectively).

**Discussion:** Preventive multimodal analgesia with an oral dose of 150 mg pregabalin VO 2 hours before surgery, together with 100 mcg morphine added to hyperbaric bupivacaine achieve an effective analgesia in orthopedic surgery; decreasing the intensity of pain and adverse effects.

#### **ORAL 07**

## Hispanic Patients with Rheumatoid Arthritis Have Prolonged Delay in Presentation to Rheumatologists Contributing to Later Diagnosis and Treatment

M. Riad MD\*, D. P. Dunham, J. R. Chua, N. Shakoor, S. Hassan, I. Castrejón. Department of Rheumatology, Rush University Medical Center, Chicago, IL.

**Background:** Early initiation of intensive treatment for rheumatoid arthritis (RA) is crucial to prevent joint damage and functional decline. Disparities in the initiation of treatment have been previously described in the US (J Rheumatol 2007; 34:2400-7). We evaluated ethnic disparities in referral and treatment initiation of RA patients at an academic rheumatology site.

**Methods:** We conducted a retrospective review of RA patients (by ICD codes) in our rheumatology clinic between 2011 and 2016. Among 542 RA patients, 152 (28%) received their initial evaluation by a rheumatologist during this period. We determined the duration between initial symptoms and first rheumatology visit and the time to initiate treatment in months. Other data extraction included referral source and demographics. Comparison between ethnic groups was performed using ANOVA or Kruskal-Wallis for differences between means or medians and chi2 for proportions.

**Results:** A total of 152 RA patients (35% White, 37% Black, 20% Hispanic, and 8% other) were evaluated. The median delay to first rheumatology visit ranged from 6 to 8 months for all patients' groups, other than Hispanics, for whom delay was 22.7 months (p=0.01). There was no difference in time to first visit between those who selected Spanish as their preferred language versus English. Hispanic patients were mainly self-referred in contrast with other groups who were referred mainly by PCPs (p=0.01). There was a trend towards increased delay when referred by physician versus self-referral, though not statistically significant (50.3 vs 37.1 months, p=0.06). Once seen by a rheumatologist, treatment initiation occurred within 1-month regardless of ethnicity.

**Discussion:** Hispanic patients with RA are at risk of poorer outcomes as a consequence of delayed presentation to rheumatologist leading to treatment delay. Identification of barriers and new strategies addressing potential sources of disparities should be sought and implemented to improve health care for all patients.

#### **ORAL 08**

The Identification of the Hispanic Perinatal Population for Purposes of Screening for Heritable Disease E. Levine MD\*, I. Sodini, C. M. Fernández.

Advocate Illinois Masonic Medical Center, Chicago, IL.

**Background:** A patient's identification of racial heritage, along with the reported past medical history, is often used to assess the risk of a variety of diseases. The incidence rates of diseases, which may have a genetic component, generally pertain to a particular population, often recognized by racial definition. The recognition of the "Hispanic" population actually combines varied populations, originating from geographically different areas, and who are possibly not from the same unique "genetically based" population. The term, Hispanic, originates from a United States census nomenclature, suggesting that all those persons who speak Spanish must be from a genetically distinct population. This report attempts to challenge this notion.

Methods: A proprietary Structured Query Language (SQL) perinatal database was used to obtain perinatal data from the point of care, from January 1, 1992 through December 31, 2011 at Advocate Illinois Masonic Medical Center (AIMMC). This database matched both obstetrical and neonatal outcome of all babies born at the medical center, and is continually monitored for accuracy using multiple data sources. From 1996 through 2000, additional demographic information was

obtained from that collected through the birth registry process for the preparation of the birth certificate. The correlations with the recorded perinatal conditions were analyzed for 1996-2000, which included over 10,000 births.

**Results:** The racial makeup of the AIMMC perinatal population was 59% as Hispanic (Latino) and 8.0% as African-American, revealing the majority as people of color. The incidence of Gestational Diabetes Mellitus (GDM) in our population was found to be 10%, 6.7% among Latinas in general, and 7.1% specifically among Category 1 Latinas. Comparing the incidence of GDM among Category 1 Latinas with that among other Latino sub-types was found to be statistically significant (p < 0.001).

**Discussion:** Race and ethnicity are important personal identifiers, and recognizing ethnic origins can be compared to the incidence of perinatal conditions. Racial differences were not found for gestational diabetes mellitus (GDM), according to the National Vital Statistics Report, yet we found in the population that we serve, an incidence of GDM of over 7% in the Latina population, as opposed to 4% in the non-Latina population. Of further interest, a sub-group of the "Hispanic" population was identified with a further statistical association of GDM. We may need to discontinue the use of the term, "Hispanic", in our medical literature, as it may not relay relevant clinical information.

### **Education-focused Projects**

#### **ORAL 09**

Spanish Language Texting Updates to Patients' Phones in The Emergency Department C. Mendoza MD\*. Department of Emergency Medicine, University of Illinois at Chicago, Chicago, IL.

**Background:** Communication during shifts regarding updates to patient care is a recognized barrier to patient satisfaction of their emergency department care. ED physicians are further overburdened during shifts. Texting updates in a secure and safe manner is a potential solution by increasing communication between patient and provider in a way that maximizes efficiency, minimizes cost and uses innovative popular technology to respond to patient's and physician's needs.

Method: The project was piloted at University of Illinois Hospital Emergency Department in Chicago.

**Results:** Data has been collected for 327 patients and 10 physicians at UIH ED, where 58% of patients identify as Hispanic/Latino. Texting platform is available in 9 language translations. In addition, 27% of patients responded to a texted survey about their experience.

**Discussion:** Texting communication between physicians and patients during stressful ED stays can be viewed as an innovative way to increase patient involvement in care and increase communication and satisfaction. The language needs of patients needs to be further studied. With the new language translation of text messages, the benefit to the Spanish speaking community is tremendous to keep them informed in the hospital and receive medical information to their phone and increase limited English proficient patients' participation in patient satisfaction research.

#### **ORAL 10**

Exposure to Violence Before Pregnancy and Substance Use During Pregnancy Among Latina Women within a Multisite FQHC in Illinois

A. Olave-Pichón MD, MPH\*, L. Martin, C. Lehn. Department of Pediatrics, University of Illinois at Chicago, Chicago, IL.

**Background:** In the US, according to the latest National Intimate Partner and Sexual Violence Survey (NISVS) 36.3% women experienced some form of sexual violence during the lifetime and 32.4% physical violence by an intimate partner. In the US, according to the recent 2015 NSDUH, 13.6% of pregnant women used cigarettes, 9.3% drank alcohol and 4.7% used illicit drugs. Previous studies have shown a positive relationship between physical and sexual abuse and drug and alcohol problems in women but today data is scarce, especially in relation to exposure to violence among Latino women. This study seeks to describe the prevalence of exposure to violence before pregnancy among Latina pregnant women and to determine its relationship with substance use during pregnancy.

**Methods:** A cross-sectional study was conducted using secondary data from a prenatal "Stress Screening Test" completed by pregnant women (n=928) who received prenatal care within a multi-site FQHC. Descriptive statistics and chi-square were

conducted to describe sample characteristics. Logistic regression was used to determine associations between substance use during pregnancy and exposure to violence before pregnancy.

**Results:** Close to six percent (n=20) of pregnant women reported violence experiences (n=2) reported violence experiences in the previous year and 4.8% (n=17) reported sexual violence experiences during their lifetime. About 4.8% (n=17) reported alcohol use during pregnancy, 2.8% (n=10) drug use and around 0.8% (n=2) reported to continue to smoke after they found out about the pregnancy and 7% (n=25) continued to smoke during pregnancy but stopped at some point after they found out about the pregnancy. Women with Medicaid insurance were more likely than women with private insurance to be exposed to sexual violence before pregnancy (70% vs. 5%). Also, women who reported alcohol use during pregnancy were more likely to be exposed to more than one type of violence compared with those without alcohol use during pregnancy (67% vs. 33%). After adjusting for confounding, alcohol use during pregnancy was 1.6 times more likely and tobacco use was 2 times more likely among pregnant women who reported being exposed to violence before pregnancy.

**Conclusion:** Reported exposure to violence before pregnancy among Latinas has shown to be positively associated with alcohol and tobacco use during pregnancy, even after controlling for sociodemographic variables. Future studies to explore the association between lifetime exposure to violence and substance use during pregnancy should include longitudinal studies with a large sample of women with diverse backgrounds to better understand the link between these problems. This study also highlights the need to study cultural and socioeconomic factors that influence substance use among Latina pregnant women exposed to violence during their lifetime.

#### **ORAL 11**

#### The Summer of Champions: An Evaluation of a Health Education Pipeline Program

A. Goyco\*, K. Barnes, O. Sandoval, S. Kowalski. University of Illinois at Chicago, Chicago, IL.

**Background:** In Chicago there is a significant disparity in access to healthcare that is amplified across social and economic borders. The CHAMPIONS NETWork is a health education pipeline program based out of the Emergency Medicine department within the University of Illinois at Chicago Health Sciences System. CHAMPIONS was created with the mission to empower high school students from underserved areas to pursue a career in healthcare and to improve quality of health in their communities. This program offers exposure to diverse careers in healthcare while also training students in bystander CPR and nutrition to then go back to teach their communities.

**Method:** This is a descriptive mixed methods study analyzing de-identified socio-demographic surveys, daily feedback, pre-/post-assessments and closing program evaluations. Qualitative data is manually coded and analyzed with Excel.

**Results:** The CHAMPIONS Summer 2018 internship hosted 30 students from nine high schools located primarily on the South and West sides of Chicago in low-income neighborhoods. The program has successfully empowered students and improved their understanding of cardiovascular disease, nutrition, and CPR. The program also strengthened the students' pathway to college and exposure to professional health careers. The students were overall more confident in their ability to pursue and succeed in careers as future health professionals.

**Discussion:** CHAMPIONS outcomes will be used to enhance the program for future cohorts by identifying programming strengths and weaknesses. The data collected from this summer will be used to continuously improve the program. The students will participate in scheduled bystander CPR trainings and community health fairs to continue improving their communities' quality of health.

#### **ORAL 12**

Building the Pipeline: An Approach to Implementing a Sustainable Mentorship Program in Partnership with Chicago Public Schools

E. García\*, D. Hong, L. Rivera, P. Ortega. University of Illinois College of Medicine, Chicago, IL.

**Introduction:** Mentorship and the advancement of Latinos in medical careers are core aspects of the mission of the Medical Organization for Latino Advancement. Data demonstrates that despite increased attention to diversity and inclusion efforts nationally, there has been little change in the underrepresentation of Latinos in medical careers. Pipeline mentorship programs have been proposed as a way to increase representation in medical careers through outreach into the underserved communities as a source of future physicians. The purpose of this project is to identify partner high schools and undergraduate institutions as focal sites for MOLA's 2018-19 Mentorship Program.

Methods: Chicago Public Schools (CPS) will be screened firstly for Hispanic Association of Colleges and Universities' Hispanic Student Institution requirements, which states that the "total Hispanic enrollment constitutes a minimum of 25% of the total enrollment." Schools will be ranked by secondary criteria, including academic ranking based on CPS rating policy, level of financial need, existence of other science or career program at the school, and level of school administration support for MOLA partnership proposal. Twenty-one high-need schools were screened based on initial criteria and emailed systematically. Contact was made with seven schools and a personalized outreach was completed to assess best fit and distribution throughout the city. Surveys consisting of quantifiable and open-ended questions will be created and given at the beginning, midpoint, and end of the school year to assess efficacy of the program and develop process improvements. MOLA will track student graduation and matriculation rates as long-term measures of success.

**Results:** Three schools were selected and relationships are being finalized through a Memorandum of Understanding. Application for recruitment mentees has been created and made live, along with flyers to advertise at selected schools. Dissemination of mentee application is ongoing, with nine high school students currently recruited.

**Discussion/Impact:** Desired impact is to increase the likelihood of Chicago Latinx high school and undergraduate students remaining interested in pursuing health careers and ultimately matriculating in health careers. This program can be replicated in other cities and health professions in the future to further impact national under-representation of minorities in healthcare.

#### **ORAL 13**

Participation in Multi-Dimensional Support Based Research Program Enhances Low Income Latino High School Students in the Pursuit of Higher Education and STEM Professions

M. Loh\*, J. Ruiz, A. M. Fresquez, H. Rasgado-Flores. Rosalind Franklin University of Medicine and Science.

Background: The absence of Latino representation in science, technology, engineering and mathematics (STEM) careers is most concerning. Currently, the Latino community holds less than two-percent and six-percent of the STEM and healthcare workforce, respectively, yet is the largest growing minority group in the U.S. public school system. Programs focused on Latino STEM representation are now key in meeting the demands of increasing STEM positions and diversifying STEM fields. Influence Student Potential and Increase Representation in Education (INSPIRE) is an eight-week applied research program designed to build a pipeline for Latino students into STEM or healthcare fields. Competitive high school students from lowincome and federally designated medically underserved areas in northern Lake County, IL are enrolled into the program following their sophomore year. Each student is then eligible to conduct biomedical research each summer at Rosalind Franklin University (RFU) until the completion of their undergraduate degree. The program provides a paid, multidimensional pipeline for students pursuing STEM or healthcare careers. The INSPIRE curriculum includes daily biomedicalrelated courses, career development seminars, parental engagement, and hands-on experience working in biomedical research under the direction of a graduate student mentor and a faculty advisor. Additionally, 50% of INSPIRE scholars in 2017 were assigned to work on projects in RFU neuroscience-based laboratories. The program yielded 100% matriculation rate of INSPIRE participants into a two- or four-year higher education institutions upon high school graduation, a statistic almost twice as high as their non-INSPIRE participating high school peers. In addition, at the completion of the 2017 internship term, all students indicated their intent or current pursuit of a career in STEM or healthcare.

### **Community Projects**

#### **ORAL 14**

Respiratory Disease Prevention, Intervention, and Education in Three Chicago Latino Neighborhoods: Little Village, Pilsen and Brighton Park

P. Quezada\*, O. Zambrano, P. Ortega. University of Illinois College of Medicine, Chicago, IL.

**Background:** Respiratory diseases are diseases of the airway and other structures of the lung that make it harder to breathe. To this day there is no cure but can be managed with proper care. Respiratory diseases are significant public health burdens

with approximately 235 million people suffering from asthma itself. Risk factors include: tobacco smoke, air pollution, occupational chemicals, environmental factors, among others (WHO, 2018).

The objective of this community project is to review and summarize several respiratory disease markers including the respiratory disease impact on the community, its prevalence, and possible environmental triggers in three Chicago Latino neighborhoods: Little Village, Pilsen, and Brighton Park. The purpose is to develop an intervention with a community-focused approach. These neighborhoods were chosen based on two factors which were zip codes with a highly dense Latino population and the amount of environmental risk factors on respiratory health present in the area.

**Method**: Literature was included in this review if it met the following criteria: Included a Latino patient population and discussed the topic of respiratory disease prevention, intervention, health education. The literature meeting this criterion was analyzed to identify the most successful strategies or interventions to prevent or reduce incidence of respiratory disease in Latino communities.

**Results:** The review identified the following four factors of greatest impact and opportunity for community intervention including: the role of environmental triggers in focused communities on respiratory symptoms, patient education on appropriate use of inhalers and spirometry, the involvement of community health workers, patient smoking and cessation education.

**Discussion/Impact:** We propose that, in order to make an impact in respiratory diseases in Chicago's Latino communities, a Chicago local public health program should initiate provider and volunteer involvement as community health workers, implementation of community surveys as part of a more detailed needs assessment regarding respiratory diseases, respiratory disease education and spirometry testing during health fairs, and increased smoking cessation education and resources for Latino patients.

#### **ORAL 15**

#### Puerto Rican Mental Health in Chicago Post-Hurricane Maria

G. Shirzai\*, P. Ortega. University of Illinois College of Medicine, College of Medicine, Chicago, IL.

**Background:** Hurricane Maria hit Puerto Rico September 16 until October 2, 2017 and presented a significant stressor to the Puerto Rico population and prompted an increase in immigration to Chicago. According to the CDC, natural disasters are stressors that can worsen symptoms of mental illness. In addition to the psychosocial stress associated with colonization of Puerto Rico mental health is a stigmatized problem in Latinx communities overall and requires culturally-sensitive screening and interventions.

**Method:** We aim to evaluate mental health screening results using the validated Refugee Health Screener-15 tool that was conducted during free community health fairs and follow-up phone calls for displaced immigrants from Puerto Rico post-Hurricane Maria and compare to results from other Chicago Latinx populations from November 2017-May 2018.

**Results:** Mental health challenges need to be considered in response to emergencies that result in displacement, such as hurricane or other causes of urgent immigration. This population presents an opportunity to better understand response to stressors in focused Hispanic communities and target appropriate interventions to promote wellness. The future goal is to provide a descriptive analysis and comparative results for various Latinx groups. IRB application in progress.

**Discussion:** By describing the screening results in this high-risk population, we hope to make recommendations regarding further research needed, and to propose program and policy recommendations regarding Chicago Puerto Rican and Latinx overall health and wellness particularly in post-disaster settings

#### **ORAL 16**

#### The My Guide E-Health Intervention for Hispanic Breast Cancer Survivors

**Garcia M.\***, Reyes K., Reyes K., Serrano G., Diaz A., Buitrago D. BA, Perez-Tamayo A. MD, Iacobelli F. PhD, Buscemi J. PhD, Penedo F.J. PhD, Guitelman, J., Yanez B. PhD

**Background:** Hispanic breast cancer survivors (BCS) are at high risk for experiencing poor health-related quality of life (HRQoL) after completion of active breast cancer treatment. Therefore, there is a need to develop culturally-tailored interventions for Hispanic BCS. To date, there have been limited interventions that have demonstrated that increasing cancer-related knowledge, self-efficacy in communication, and self-management skills can improve HRQoL among Hispanic BCS. These interventions have been delivered in person or by phone, which may be burdensome for Hispanic BCS.

**Method:** To facilitate intervention delivery, we developed My Guide, a Smartphone application aimed at improving HRQoL among Hispanic BCS. The purpose of the current study is to describe the feasibility results of a 4-week pilot trial testing My Guide among Hispanic BCS.

Results: Twenty-five women enrolled in the study (75% recruitment rate) and 22 women were retained (91.6% retention rate). Mean time spent using My Guide across the 4 weeks was 9.25 hours, and mean score on the satisfaction survey was 65.91 (range 42-70), in which higher scores reflect greater satisfaction. Participants' scores on the Breast Cancer Knowledge Questionnaire significantly improved from study baseline (M = 9.5, SD = 2.92) to the post-intervention assessment (M = 11.14, SD = 2.66), d = .59.Participants' HRQoL scores improved over the course of 4 weeks, but these improvements were not statistically significant.

**Discussion:** Overall, My Guide was feasible and acceptable. Future studies will assess the preliminary efficacy of My Guide in improving HRQoL in a larger, randomized trial of Hispanic BCS.

### **Posters**

### **Research Projects**

#### **POSTER 01**

Impact of Traditional Risk Factors for the Development and Outcomes of Atrial Fibrillation across Racial-and Sex-Groups

**K. Ledezma**, F. G. Rivas\*, T. Shih, M. McCauley, J. Rehman, W. L. Galanter, D. Darbar. University of Illinois at Chicago, College of Medicine, Chicago, IL.

**Background:** Traditional risk factors for the development of atrial fibrillation (AF) and its outcomes are established in non-Hispanic whites (NHWs). The role of these risk factors in the pathogenesis of AF among minority groups and women remains unclear. Cohort studies have consistently shown worse AF-related outcomes in these groups.

**Objectives:** To determine the role played by race- and sex-specific risk factors in both the etiology and outcomes of AF in non-Hispanic blacks (NHBs), Hispanics/Latinos (H/Ls), and NHWs.

Design, Setting, and Participants: Using electronic medical records (EMR), 2978 patients with an ICD-9 CM 427.3 for AF were identified over a 7-year period (2008-2015). Risk factors were identified from ICD-9 CM: hypertension (HTN), diabetes, stroke/transient ischemic attack (TIA), smoking, chronic obstructive pulmonary disease (COPD), coronary artery disease (CAD), peripheral vascular disease and obstructive sleep apnea (OSA). Multivariate analysis of variance was used to compare incidence of AF risk factors. Odds ratios (OR) for stroke were calculated for each risk factor.

**Results:** NHBs and H/Ls experienced significantly more stroke NHWs (27% & 24% vs. 19% p<0.01). Females had less HTN (p=0.0002), CAD (p=0.025), and smoking rates (p<0.0001), but higher stroke rates (p=0.009). HTN rates carried highest burden among NHB females (p=0.015), and a trend towards increased stroke (p=0.099). Age-adjusted risk factors in stroke varied significantly across racial and sex groups.

**Conclusion:** There are variable patterns of AF risk factors across race/ethnicity and sex. Disparate rates of stroke in minorities and women appear to be related to the differential role played by traditional risk factors, underscoring the importance of ethnic and sex-specific risk factors for the development and outcomes of AF.

Hispanics' Perceptions of a Culturally Targeted Transplant Program: A Mixed Methods Study.

**N. Francone\***, N. Alhalel, J. C. Caicedo, R. Ruiz, A. Salazar, S. Primeaux, E.J. Gordon. Northwestern University Feinberg School of Medicine, Chicago, IL.

Background: Although Hispanics have a disproportionally higher prevalence of end-stage renal disease than non-Hispanic whites, fewer waitlisted Hispanics receive living donor kidney transplants (LDKTs). Northwestern Medicine's® (NM) Hispanic Kidney Transplant Program (HKTP) is culturally targeted to Hispanics and associated with a significant increase in LDKTs among Hispanics. The HKTP was implemented in other transplant programs, but little is known about Hispanic perceptions of HKTP's culturally competency. We present preliminary findings from a multi-site study assessing potential kidney recipients' and potential living donors' perceptions of HKTP's cultural components.

**Methods:** Participants were recruited from NM in Chicago, IL and Baylor University Medical Center in Dallas, TX. Semi-structured interviews were conducted to assess perceptions of the HKTP's ability to meet cultural, social, and linguistic needs of Hispanic patients. Cultural components assessed were the transplant physician's and transplant team's: biculturalism, linguistic congruence, sensitivity to identity, values, and beliefs, and participants' understanding and acceptability of living donation and transplantation. Qualitative thematic analysis and descriptive statistics were performed.

**Results:** To date, 17 potential recipients and 9 potential LDs participated (72% participation rate). Most participants were male (58%) and were of Mexican decent (85%). Participants reported that the ability to speak Spanish was not sufficient to be perceived as bicultural. Participants stated that linguistic congruence requires that the provider be able to avoid or use colloquialisms of all Hispanic nationalities. All participants "strongly agreed" or "agreed" that the transplant surgeon and transplant team they interacted with were sensitive to their cultural identity, values, and beliefs. After attending the HKTP, most participants felt more favorable towards kidney transplantation (96%) and living donation (96%).

**Conclusion:** Our findings suggest that the HKTP staff were sensitive to the participants' identity, values, and beliefs, and positively shaped participant's perceptions of kidney transplant and living donation. Participants' perceptions of the HKTP can provide insight into how HKTP faculty and staff can improve its provision of culturally competent care, which may contribute to increasing LDKTs and reducing transplant disparities in the Hispanic population.

#### **POSTER 03**

#### Multiple Health Risk Behaviors among Puerto Rican and Mexican Men

**A. Alonso\***, A. Rademaker, A, Dykema-Engblade, L. Calderon, M. Nava, L. Sanchez-Johnsen. Department of Psychiatry, University of Illinois at Chicago, Chicago, IL.

**Background:** Individuals may concomitantly exhibit more than one health risk behavior such as low fruit and vegetable intake, physical inactivity, and smoking at any given time placing them at risk for certain cancers, cardiovascular disease, and diabetes. However, the extent to which health risk behaviors cluster together among Latino men has been largely unexplored.

Methods: The aim of this study was to examine the frequency of multiple health risk behaviors (smoking, physical inactivity, and low fruit and vegetable intake among Latino men and to examine whether the frequencies differed based on Latino background. The second aim examined whether various health risk behaviors cluster together among Latinos, and further, to examine whether the health risk behavior clusters differ based on ethnicity. Adult Puerto Rican and Mexican men self-reported physical activity, fruit and vegetable intake, and smoking status as part of a larger NIH-funded cross-sectional study of culture and health behaviors in the Chicagoland area (Sanchez-Johnsen et al., 2017). The prevalence of health risk behaviors was computed. To examine health risk behavior cluster groups, a series of hierarchical log-linear models using SAS CATMOD were fitted to the observed counts.

Results: The most common health risk behavior cluster was low physical activity and low fruit and vegetable consumption (27%). The most common health risk behavior cluster among Puerto Ricans was current smoker and low fruit &vegetable intake (14%). Results from the log-linear models showed dependence among low physical activity and low fruit and vegetable intake, independent of smoking status. The most common health risk behavior cluster among Mexicans was low physical activity and low fruit and vegetable intake (15%). Results from the log-linear models showed dependence among low physical activity and smoking, independent of low fruit and vegetable intake.

**Discussion:** These finding suggest that targeting both health risk behaviors for each ethnic group may be more effective when developing behavior change interventions.

### **Education-focused Projects**

#### **POSTER 04**

Retrospective Analysis of Postpartum Visits at PSMEMC FM Residency Affiliated FQHCs

J. Guevara MD, A. Milan-Flanigan, R. R. Avendano\*, J. Mendoza, C. Gonzalez. PrimeCare Community Health, Presence Saints Mary and Elizabeth Medical Center, Chicago, IL.

**Background:** Postpartum care decreases maternal and newborn morbidity and mortality. In fact, 61% of childbirth deaths occur in the first 42 days postpartum. Unfortunately, only  $58\% \pm 21$  of patients will receive postpartum care within six weeks postpartum. In Illinois, 51% of women attended postpartum visits in 2016 with notable disparity amongst Hispanics and African Americans. Also, there is a significant variation on the trends of postpartum visits nationwide including the quality of postpartum care and the timing of the initial encounter. For example,

ACOG reported only a 40% of postpartum visit attendance. On the other hand, Healthy People 2020 reports a national rate of 90% postpartum care. Both analyses remarked important disparities in ethnic minorities. For this reason, this project's objective is to analyze postpartum visits in Prime Care Community Health, which is an FQHC serving the Western areas of Chicago with primarily Hispanic and African American patients. This project will identify potential barriers to care and develop solutions to decrease maternal morbidity and mortality in the postpartum period.

**Methods:** Retrospective analysis of postpartum visits amongst established prenatal patients at two FHQC academic centers from 01/01/2013 to 12/01/2017. This analysis will include reviewing the timing of the initial postpartum visit, and the quality of postpartum care by addressing family planning, breastfeeding, chronic health conditions, pregnancy complications and mental health. The project will compare results based on age, race, marital status, insurance coverage, parity, type of delivery, zip code and employment.

Results: Research in progress.

**Discussion:** Potential results may help to foster interventions for postpartum care improvement and develop future research targeting minorities.

#### **POSTER 05**

#### Increasing Diversity in Radiology

A. Williams Darrow\*, M. Rodríguez, K. Xie. University of Illinois at Chicago, School of Medicine, Chicago, IL.

**Background:** Radiology is a field of medicine that has historically lacked diversity in gender, race and ethnicity of practitioners, including Latinos. At UIC we are seeking to increase diversity in radiology with a student-led initiative to raise awareness of the profession among Latino medical and high school students.

Methods: We formed a Diversity in Radiology Committee which will meet quarterly and host a minimum of 1 student event per semester. Our first event will be in August 2018 and will include a panel of women and minority practitioners in radiology, including Latinos. Panelists will discuss radiology in general, why they chose the specialty, the importance of Latino and other minority groups in the field and present interesting cases. Our second event will be a hands-on equipment demo featuring radiological equipment such as core needle biopsy probes and ultrasound machines. We will be also partnering with the Hispanic Center of Excellence (HCOE) at UIC to reach out to Latino high school students who are considering a career in medicine. Our outreach will span multiple generations of Latino future physicians. A literature review is included which analyzes diversity in radiology and the impact of Latino providers on the health outcomes of Latino patients.

Results: Pending. We hope to see an increased number of Latino applicants and practitioners in the field of radiology in the future.

**Discussion:** The events will impact all medical students at UIC as all will be invited to our events and receive mailings from our committee. The larger impact over time will be an increase in the number of Latino, other minority and female providers in radiology. We feel that it is important for practitioners to reflect the communities that they serve and look forward to a more diverse (and more Latino!) pool of radiology providers in the future.

The Asking Social Questions (ASK) for Health Study at University of Illinois Health (UIH): Data Analysis K. Ospino\*, M. Minier, A. Osta, A. Schwartz. University of Illinois at Chicago, College of Medicine, Chicago, IL.

A healthy amount of stress is necessary for a child to create coping mechanisms, however, a high amount of constant stress, called toxic stress (TS), can have life-long negative health consequences. TS includes unmet social needs (USNs) and adverse childhood experiences (ACEs). The American Academy of Pediatrics recommends that pediatricians screen for TS factors within their pediatric population to provide resources to build resilience against stress and prevent future TS. The Child and Youth Center (CYC) at University of Illinois Health started screening for TS during well child visits in October 2016. 40% of clinic patients were Hispanic. The aim of this research project is to determine the prevalence of TS and to determine any associations between the child's age and home zip code. All CYC TS screenings from October 2016 to May 2018 were entered into RedCap. There were 6706 total screenings. The data was exported into Excel and statistical analysis will determine prevalence of TS and associations between the patient's age and their zip code. Geographic heat maps will be created. The prevalence of patients that had at least one TS factor was 48.02% (prevalence of at least one USN was 40.16% and the prevalence of at least one ACE was 18.07%). Data analysis for associations between TS screening results and the patient's age and their home zip code are currently underway. Using demographic information from the Census Bureau, there will be a greater understanding of social factors affecting a population and relationships between social factors and TS can be found per neighborhood. An example is a neighborhood of predominantly Latinos with high rates of poverty may have high rates of individuals without a HSD/GED. Resources to cope with stress can be distributed based on zip code or through facilitate referrals with community partners.

#### **POSTER 07**

## Examining Out-of-Hospital Cardiac Arrest Survival in the Racioethnically Diverse Neighborhoods of Chicago

A. Carrera\*, M. D. Ríos H. Nguyen, R. Amirsoltani. University of Illinois at Chicago, College of Medicine, Chicago, IL.

**Background**: Out-of-hospital cardiac arrest (OHCA) affects nearly 400,000 individuals annually and about 10% of victims survive. It disproportionately affects persons who are Black compared to Whites, and the impact on Hispanics or Latinos is not well understood. Cases from predominantly Black or Hispanic neighborhoods may have significant delays within the chain of survival. Regional differences in survival of OHCA have also been observed.

**Objective**: We compared survival-to-hospital-discharge among OHCA patients from different racioethnic neighborhoods in the City of Chicago.

Methods: We retrospectively reviewed OHCA data prospectively entered into the Chicago Cardiac Arrest Registry to Enhance Survival (CARES) from September 2013 through December 2017. The locations of OHCA cases were geocoded into 798 census tracts in the city of Chicago. Tracts were classified as "White", "Hispanic" or "Black" when 70% or more residents self-reported in that category. Tracts without a racioethnic classification were classified as "Integrated". Hierarchical logistic regression analysis explored the association between a census tract's predominant racioethnic group and survival-to-hospital-discharge. A secondary analysis was done to explore association between neighborhood level variables and outcomes

Results: When adjusting for Utstein variables, cases with a shockable-rhythm and witnessed-arrest from Black and Hispanic tracts had worse survival-to-hospital-discharge than White or Integrated tracts (OR: 0.59 (95% CI: 0.36-0.97); OR: 0.48 (95% CI: 0.24-0.98); respectively). These groups also had worse neurologically-intact survival (OR: 0.52 (95% CI: 0.31-0.87); OR: 0.42 (95% CI: 0.19-0.92); respectively). Upon admission to the hospital and in-Utstein, cases from Hispanic tracts had worse survival and neurologically intact survival. There were no significant associations between survival outcomes and neighborhood socioeconomic variables other than predominant racioethnic group.

**Impact**: Cardiac arrest victims from Integrated neighborhoods had better survival outcomes than those from Hispanic and Black neighborhoods. The mechanism leading to better survival should be examined as it could have implications for targeting future interventions to improve OHCA survival.

## Validation of PROMIS® Computerized Adaptive Testing (CAT)-Administered Item Banks in Juvenile Myositis

V. Esparza\*, K. Ardalan. University of Illinois at Chicago, College of Medicine, Chicago, IL.

Background/Purpose: Juvenile myositis (JM) causes proximal muscle weakness and distinctive rashes that can worsen quality of life (QoL) [1-3]. Existing QoL surveys (e.g. PedsQL, Childhood Health Assessment Questionnaire [CHAQ]) have been used in JM, but are limited by factors such as ceiling/floor effects and cost [4-6]. Patient Reported Outcomes Measurement Information System (PROMIS) is available in two formats: computerized adaptive testing (CAT)-administered item banks and fixed short forms (SF). CAT-administered PROMIS item banks can potentially overcome existing limitations of QoL surveys [7]. This study intends to evaluate the validity and reliability of CAT-administered PROMIS item banks. Methods: English-speaking JM patient/parent dyads (5-17yo) are enrolled at routine visits. Demographics and clinical/laboratory assessments of disease activity data are collected [6]. Patients aged 8-17yo complete self-reported surveys at each visit, including: PROMIS CAT-administered Pain Interference, Physical Function, Fatigue, and Emotional Distress; PedsQL generic core scales and rheumatology module (PedsQL-GC/-RM); and CHAQ. Parents of 5-17yo children complete proxy-report versions of all of the above surveys at each visit. Interrater reliability between patient/parent report will be assessed for each PROMIS domain with intraclass correlation coefficients (ICC; values > 0.70 optimal). Criterion validity (i.e. comparison of PROMIS domains with PedsQL and CHAQ) and construct validity (i.e. comparison of PROMIS domains with disease activity) will be assessed with Spearman correlation coefficients (Spearman's rho > 0.70 optimal). Results: Data collection began July 2018. We hypothesize PROMIS CAT will be reliable and valid for measuring QoL. Additionally, greater response precision and less pronounced ceiling/floor effects than CHAQ and PedsQL may be demonstrated [7]. No data is documented for non-English-speaking patients/parents due to lack of availability of some survey forms in Spanish.

**Impact/Discussion**: If study findings are favorable, PROMIS CAT-item banks could be used routinely for measurement of QoL in patients with JM. Surveying patients and parents directly can aid care providers in tracking the impact of disease in relation to adjustments in therapy, leading to an increase in QoL in this patient population [7].

### **Community Projects**

#### POSTER 09

Promotoras de Salud: Identifying Best Practice for Training, Implementation, and Outcome Metrics of Community Health Workers

E. Rosales\*, P. Ortega. University of Illinois College of Medicine, College of Medicine, Chicago, IL.

**Background:** Many health organizations across the country are adopting the concept of *promotores de salud*, the Spanish term for community health workers. Although there is broad consensus on the benefits that *promotores* bring to their communities, there is a gap in the literature regarding established best practices for *promotores de salud* program implementation. The purpose of this review is to identify successful programs, and best practice for implementation of new programs.

**Method:** A review of published articles was conducted using keywords, and 12 articles met the pre-identified inclusion criteria. The articles were reviewed regarding themes related to factors that influenced program implementation success. **Results:** Three salient characteristics were identified in the reviewed literature: incentives, respect, and oversight. CHW volunteer programs are the most successful when their volunteers are incentivized. Because the economic impact of volunteering, in the form of lost wages, varies widely across the world, so does the value that volunteer CHWs place on financial incentives. Respect within the community and the social prestige that comes along with their role also contributes to increased CHW satisfaction and increased retention rates. Finally, oversight is necessary because training alone is not sufficient for program success. Specifically, community health workers need practical, feasible and supportive supervisory approaches that avoid the pitfalls of the routine supervision that are common practice in health systems. **Discussion:** The three core characteristics shared by successful programs identified by this review may serve as the

foundation for a best practice guide to successful implementation of promotores de salud programs in other communities.

Colorectal cancer screening in the Chicago Hispanic/Latino community: Assessment and Intervention A. Plana, A. Camarena\*, P. Ortega. University of Illinois College of Medicine Chicago, IL

Background: The Center for Disease Control regularly analyzes the health needs of the Hispanic population in the United States. In its assessment, "Hispanics have different degrees of illness than whites...A lower death rate overall, but about a 50% higher death rate from diabetes. 24% more poorly controlled high blood pressure; 23% more obesity; 28% less colorectal screening." (CDC website). Much research attention is given to the challenging problem of improving diabetes management in the Latino community, as should be. Colorectal cancer screening, however, receives less attention and yet may still have a sizable impact on the Latino population's health if improved.

Does the disparity in colorectal cancer screening apply to Chicago's Latino population? In attempting to answer this question, the two sources found were the Healthy Chicago 2.0 report from 2014 and the Hispanic Community Health Study from UIC. Comparing the data from both sources, we see that the national issues delineated in the CDC's research are also affecting our Latino population in Chicago. One goal from the Healthy Chicago 2.0 report fit our research question quite well: "Increasing the colon cancer screening among older adults living in poverty by 10%. This involves promoting 80% by 2018 initiatives to detect and treat colorectal cancer." Our question is what is being done to address this screening disparity.

**Method:** 1. Summarize current data available regarding rates of colorectal cancer screening in Chicago's Latino community. 2. Summarize current understanding of sociocultural factors that may affect rates of colorectal cancer screening in the Latino community.3. Propose a community survey or intervention that can be implemented in MOLA's public health plan for 2019 to improve colon cancer screening targeting the Latino community.

Results/Discussion: The product of this research project is two-fold: a literature review summarizing the work done to-date about Chicago's Latino community, and a framework for a future intervention to improve rates of colorectal cancer screening in the Latino community.

#### **POSTER 11**

#### The MONARCAS Community and Academic Collaborative Program

**K. Mancera-Cuevas\***, P. Canessa, J. S. Chmiel, E. A. Hahn, A. H. Chung, D. L. Erickson, R. Ramsey-Goldman. Northwestern University, Chicago, IL.

**Purpose**: The CDC Popular Opinion Leader (POL) model was implemented in a lupus education program (MONARCAS) for the Latino community. The program aim was to increase lupus awareness by training high school students, community health workers, and parents.

**Methods**: A curriculum was developed training POLs to disseminate concepts about lupus signs and symptoms. Pre- and post-program questions assessed lupus knowledge and message dissemination.

**Results**: POL groups represented distinct demographic characteristics with Spanish or English language dominance. POLs reported increased lupus knowledge and program satisfaction.

**Conclusions**: Future program goals should aim to increase understanding and improving access to care for Latino communities affected by lupus.

#### **POSTER 12**

Effect of Health Policy on Unplanned Teenage Pregnancy Rates: Description, Cultural relevance, and Impact on the Hispanic Community

L. Streber-Ramírez MD\*, J. Estrada, P. Ortega. University of Illinois College of Medicine

**Background**: Unplanned pregnancies have consistently decreased for the past 10 years in the United States (US). Research shows that among teens, the driving factor for this decline is increased prevalence and more appropriate use of contraceptives. Yet, the teenage pregnancy rates among Hispanic origin have decreased at a lower rate than other racial/ethnic groups in the US.

**Objectives**: This community project will describe federal, state and county policies over the past 12 years that have potentially contributed to the decrease of unplanned teen pregnancies. In order to understand the variant effect on the

Hispanic community, we will also review how these policies may have differently affected the Hispanic population due to existing cultural, educational, economic or linguistic differences in this population.

**Methods**: A review of active or non-active (currently being proposed through government agencies, and those that have been retired) health policies from 2006 through present time that include contraceptive use, prevention of unplanned pregnancy, and prevention of teenage pregnancy will be conducted at the national, state, and county level. The health policies will be selected based on the applicability to the Hispanic community with respect to cultural competency, linguistic access, educational level, income, geographical location, and current legal status.

Results: Results are pending, summer work being conducted as a MOLA Summer Internship project.

**Discussion/Impact**: Results are expected to provide an understanding of the cultural relevance and impact of health policies to teenage pregnancy rates in the Hispanic community, which is disproportionally affected by this public health challenge. The results of the project will help to inform the usefulness of future health policies that may affect teenage pregnancy rates in this high-risk population on local, state, and national levels.

### **Case Reports**

#### **POSTER 13**

Altered mental status: it's not all in your head

E. Ceppi\*, A. Bravo, A. Cano. University of Illinois at Chicago, College of Medicine, Chicago, IL.

Introduction: Meningiomas are the most prevalent primary CNS tumor, constituting one-third of all brain and spinal cord growths. Although benign in nature, these masses can produce broad differential diagnoses depending on location, necessitating thorough evaluations in patients with otherwise unexplained neurologic or psychiatric symptoms. Important risk factors include exposure to ionizing radiation, female sex, and middle adulthood. Here we discuss an alarming presentation of meningioma in the emergency department. Despite presenting with symptoms suggesting schizophrenia, key discrepancies in patient history prove crucial to establishing a diagnosis, which we explore in further detail.

Case Description: 33 year old male with history of total body radiation and bone marrow transplant presents to the ED with suicidal ideation and auditory hallucination. Patient reports hearing voices telling him he is worthless and ordering him to kill himself, messages through the television, children screaming, and presence of an electrical grid in his backyard. There is no history of psychiatric illness. Patient's mother brought him in and reports that he has been depressed and recently expressed desire to commit self-harm with multiple plans to enact. She also endorses that he has started complaining of headaches. History of unprescribed drug abuse to help cope with depressive and psychotic personality changes. Patient was recommended for CT based on unusual presentation, which revealed a large right anteromedial frontal lobe mass indicative of Grade 1 meningioma. Patient was treated with resection with subsequent symptom resolution.

**Discussion**: This case illustrates the need for imaging when a patient presents with psychiatric symptoms inconsistent with history and pathology. Consider frontal meningioma in differential diagnosis when patient without history of psychological disorder presents with progressive psychological disturbance not within typical age of onset for schizophrenia.

#### **POSTER 14**

Robotic-Assisted Placement of Hepatic Artery Infusion Pump for Regional Chemotherapy of Colorectal Liver Metastasis with Indocyanine Green Perfusion Test

L. Castro Gil\*, M. Spaggiari, K.A. Tulla, P. Ugwu-Dike, P. DiCocco, E. Benedetti, P.C, Giulianotti, I. G. Tzvetanov. University of Illinois at Chicago, College of Medicine, Chicago, IL.

**Introduction**: Isolated unresectable colorectal liver metastases are treatable with combination therapies such as surgical resection, hepatic artery infusion (HAI) chemotherapy, and systemic chemotherapy. Minimally invasive methods provide an avenue for improvement in patient surgical outcomes. We hypothesized that robotic assisted placement with not only provide a good platform to, not only place the device, but also allow for indocyanine green (ICG) in-vivo confirmation in place of methylene blue (MB).

**Patient**: A 60-year-old male presented in January 2018 with a cecal mass with bilobar unresectable liver metastasis. He underwent primary tumor resection in January, and due to the isolated nature of his systemic disease, the decision was made to treat the patient with neoadjuvant combination chemotherapy to downstage the patient for surgical resection in the future.

**Technique**: The patient was placed supine on the operating room table, and four robotic and two laparoscopic assistant ports were placed. A standard cholecystectomy was performed. The common hepatic artery was identified and used to guide the dissection of lymph node basin, the gastroduodenal artery (GDA) and the right gastric artery. The gastric artery was ligated. The robotic scissors were used to create a transverse GDA arteriotomy, and the HAI pump catheter tip was advanced and secured. An ICG perfusion test was performed to ensure isolated hepatic perfusion. Subsequently, systemic injection of ICG was used to rule out hepatic artery flow obstruction. Estimated blood loss was 20 ml, and the postoperative course was uneventful. On post-operative day 13, simultaneous systemic mFOLFOX and HIA infusion of FUDR were initiated. **Discussion**: ICG has the advantage of providing superior optical properties at lower a dosage then MB to assess proper hepatic uptake and no extrahepatic perfusion while minimally invasive surgery allows for faster recovery and simultaneous initiation of chemotherapy to possibly bridge a patient to resection.

#### **POSTER 15**

#### A non-specific tale: Microscopic polyangiitis (MPA)

J. Del Cid Fratti MD\*, S. Jose, J. Schmukler. Department of Medicine, John H. Stroger Jr Hospital, Chicago, IL.

**Background:** The anti-neutrophil cytoplasmic antibody (ANCA)-associated vasculitides (AAV) can present dramatically with rapidly progressive glomerulonephritis (RPGN) and/or diffuse alveolar hemorrhage, these manifestations are almost preceded by insidious constitutional symptoms, which are non-specific and may lead to a delay in diagnosis.

Case Presentation: An 82 year old Hispanic woman with no past medical history presented to the ED with 4 weeks of nausea, vomiting and fatigue. Physical exam was unremarkable. Initial laboratory evaluation revealed elevated serum creatinine levels and elevated erythrocyte sedimentation rate; urinalysis was significant for microscopic hematuria and RBC casts. The patient was admitted and subsequent serum MPO-ANCA were positive. A renal biopsy showed pauci-immune necrotizing glomerulonephritis with crescents without immune complex deposition. A diagnosis of MPA was made and the patient was started on pulse dose intravenous corticosteroids for 3 days followed by high dose oral prednisone, as well as pulse IV cyclophosphamide. The serum creatinine improved and symptoms subsided. She was discharged and seen in clinic afterwards found to be in clinical remission. Review of the electronic medical records revealed that the patient presented to the ED 2 weeks prior to her admission with similar complaints and microscopic hematuria but translation was not done by an official Spanish translator, further evaluation was not done.

**Discussion:** In this case, the patient was admitted due to RPGN. Retrospective history at the time of admission revealed a 4-week prodrome of non-specific symptoms with microscopic hematuria. This abnormality went unrecognized and led to her acute presentation of RPGN. This case serves as a reminder that AAV almost invariably begin as a non-specific prodrome that, if unrecognized, may evolve to life- or organ-threatening manifestations. This case might represent miscommunication due language barrier between physician and patient.

#### **POSTER 16**

#### When Being Numb Hurts: A Case of Hereditary Sensory and Autonomic Neuropathy

J. Sleiman MD\*, M. J. Seares, J. De Cid Fratti, V. E. Prado, E. Muñoz. Department of Medicine, John H. Stroger Jr Hospital, Chicago, IL.

**Background:** Hereditary peripheral neuropathies are caused by dominant or recessive gene mutations expressed by peripheral neurons and/or Schwann cells leading to disruption in vesicular transport and axonal trafficking. The most common variant affects both motor and sensory nerves (HMSN). Sensory abnormalities predominate in hereditary sensory and autonomic neuropathies (HSAN), which will be the focus of this clinical vignette. The hallmark of HSAN is the presence of small-fiber sensory loss. This results in chronic ulcerations, potentially progressing to severe tissue infections, leading to amputations. The first description was reported in 1852 with three brothers presenting with neurotrophic plantar ulcers. **Case presentation:** Our patient is a 24-year-old Latino male who presented with painless recurrent ulcers involving both toes since the age of 9. These ulcers were complicated by infection requiring frequent antibiotics and eventually amputation of two toes. He denies pain nor loss of sensation in his feet. CBC, electrolytes, HbA1c, Vitamin B12, TFTs, RPR, ANA, ANCA, ESR

and CRP were within normal limits. Lower extremities arterial dopplers were unremarkable. The neurologic examination was unremarkable apart from a subtle decrease in pain sensation in his feet. He was referred to neurology. Nerve conduction studies revealed neuropathy principally axonal in nature. Sural nerve biopsy showed extensive loss of axons affecting large myelinated fibers. Genetic mutation was positive for WNK1 mutation, which is suggestive of HSAN Type 2.

**Discussion:** HSAN is a rare clinical entity. The five subtypes of HSAN are differentiated according to an inheritance pattern and sensory complaints. Type 2 is an autosomal-recessive condition presenting with loss of pain and temperature sensation. Autonomic involvement may be variable. Differentials include diabetes, trauma, infection, autoimmune, neuropathy and vascular diseases. Clinical features, electrodiagnostic studies, and nerve biopsies are the mainstay of diagnosis. Management is primarily symptomatic and preventative. Prognosis is unclear because long term follow-up series are inadequate.

#### **POSTER 17**

#### Creutzfeldt-Jakob Disease Presenting with Alien Hand Syndrome and Hemineglect

J. Cooper MD\*, M. Medina, K. Thurin, Z. N Aftab. Department of Psychiatry, University of Illinois at Chicago, Chicago, IL.

**Background:** Creutzfeldt-Jacob Disease (CJD) is a rare prion disease associated with a rapidly progressive dementia syndrome and can present with a range of neuropsychiatric symptoms. Alien hand syndrome (AHS) is a rare neurologic symptom, usually related to right parietal lobe dysfunction, which can be mistaken for a psychotic or functional psychiatric symptom. Stigma associated with psychiatric illness is common in the Hispanic/Latino community, as are functional disorders as manifestations of psychological distress. Here we highlight a syndrome indicative of organic neurologic disease which should not be mistaken for a functional psychiatric disorder.

**Method**: Single case report.

Case presentation: 61 year old woman with a history of depression admitted to a neurology inpatient service with progressive left-sided abnormal movements, psychiatry was consulted to evaluate for conversion disorder. Patient described her left arm as not doing what she "told" it to do. Her left arm demonstrated myoclonic jerks, purposeless movements, apraxia, dysmetria, and tactile stimulation neglect. Left sided upper motor neuron signs were present including an up-going toe, Hoffman's sign and spasticity. Brain MRI revealed high DWI signal particularly in the right caudate and right parietal lobe in a cortical ribboning pattern. EEG showed focal right centro-parietal dysfunction. Patient was diagnosed with CJD and progressed over the next several weeks to coma and death.

**Discussion:** This case highlights the AHS as a symptom which sounds odd and possibly psychotic or functional in nature, but is actually indicative of neurologic dysfunction, particularly in the right parietal lobe. A detailed neurologic exam revealed other findings consistent with right hemisphere dysfunction. The AHS is likely not well known in the Hispanic/Latino community, and psychiatric and functional disorders are quite common. Our case highlights the need for physical symptoms to be systematically evaluated before making the attribution of a psychiatric or functional cause.

#### **POSTER 18**

#### The Pain was Real

G. Subieta MD. Department of Anesthesiology, John H. Stroger Jr Hospital, Chicago, IL.

**Background:** The opioid epidemic raises the question about who is the proper patient who may benefit from this medication. Although there is no evidence that chronic opioids have a role in chronic pain, the practitioner should always be vigilant and have an open mind when the patient complains of intractable pain. The purpose of the case report is to illustrate how current socio-political views may affect patient care.

Case description: We present a case of a 59 YO Hispanic male who used to be a blacksmith in Mexico and got injured when a horse kicked him in the head and injured his neck. From this injury, he developed severe weakness and was initially managed with a cervical fusion that partially helped his neurological deficits and pain. He then underwent a spinal cord stimulator implantation with improvement of his pain symptoms followed by progressive opiate taper off. The patient returned this year with significant pain without a triggering event and without neurological deterioration and was concerned that his device had a malfunction. His stimulator was reprogrammed with only partial relief of the pain, and he was given a short course of opioids. He returned to the clinic mentioning no relief of his symptoms and as a result, cervical imaging studies were repeated. His cervical x-ray showed that his fusion was unstable and coming apart which led to an urgent neurosurgical consultation and intervention.

**Discussion:** The media coverage of the opioid epidemic has resulted in many chronic pain patients who return to our service manifesting worsening symptoms with the expectation that their opioid therapy will remain in place. It has also frightened

many physicians who will avoid prescribing opioids even if they might be warranted. Chronic opioid therapy should be directed on an individual basis, avoiding a cookie cutter approach. Furthermore, cultural sensitivity plays an essential role in management of chronic pain patients. This case serves as a lesson applicable to every provider in that any worsening pain should be thoroughly addressed with a complete work up, abandoning this new "one fits all" paradigm in order to avoid potential medical legal pitfalls.

#### **POSTER 19**

The Forgotten Disease: Lemierre's Syndrome

Á. F. Sánchez\*, A. Cano. University of Illinois at Chicago, College of Medicine, Chicago, IL.

Lemierre Disease is a septic thrombophlebitis of the internal jugular vein associated with septicemia and metastatic foci infection of the head and neck that could lead to a pulmonary embolism. It is commonly found in young adults or patients who present with the following symptoms: pharyngitis, persistent fevers and septic emboli. The diagnosis is often delayed due to its rarity. Ultrasound and Computerized Axial Tomography (CT) of the internal jugular vein is commonly used to identify the thrombosis. Lemierre Disease is often misdiagnosed or underdiagnosed due to its similar clinical presentation as other common diseases. We report a single case of Lemierre Disease and access the importance of having a broad differential diagnosis.

Note:

\* Presenting author
Affiliation of the primary authors

# Awards MOLA Latino Health Symposium 2018

Oral Presentations: 1<sup>st</sup> Place: Kryztal Peña (Oral 04)

2<sup>nd</sup> Place: Martha García (Oral 16)

Poster Presentations: 1<sup>st</sup> Place: R.R. Avendano/ J. Guevara (Poster 04)

2<sup>nd</sup> Place: Angélica Alonso (Poster 03)









# Author Index (in alphabetical order)

٨		DiCocco P	21
A Abi Nader M	7	Dunham D.P	10
AL-Castro	7		16
Aftab ZN	23	Dykema-Engblade A	10
		-	
Aguilar R	7	E Evialence E	20
Alhalel N	18	Erickson E	20
Alonso A	16	Esparza V	19
Amirsoltani R	22	Estrada J	20
Ardalan K	19		
Avendano RR	20	F	
Ávila C	8	Fernández CM	10
		Ferrans C	8
В		Francone N	16
Barnes K	12	Fresquez AM	13
Benedetti E	27		
Bonet-Vázquez M	7	G	
Bravo A	21	Galanter WL	15
		García E	12
C		García M	14
Caicedo JC	16	García Z	9
Calderon L	16	Giulianotti PC	21
Camarena A	20	Gonzalez C	17
Canessa P	20	Gordon EJ	18
Cano A	21	Goyco A	12
Cardenas S	8	Guevara J	17
Cardoso-Mendoza E	8		
Carrera A	18	Н	
Castrejón I	10	Hahn E.A	20
Castro Gil L	21	Hassan S	10
Ceppi E	21	Hong D	12
Cervantes CE	7		
Chmiel JS	20	J	
Chua JR	10	Jacob E	7
Chung AH	20		-
Cooper J	23	K	
Correa R	7	Kowalski S	12
Cuadra SL	9	KOWaiski 5	12
Cudula 3L	9	L	
D		Ledezma K	15
	15	Linares Gavidia S	
Darbar D	15		9
Del Cid Fratti J	9, 22	Lehn C	11
Diaz L	8	Levine E	10

Loh M	13	Rodríguez M Rodríguez D Rosales E	17 7 19
M	_	Ruiz R	13
Mahoney J	7		
Mancera-Cuevas K	20	S	0.46
Mariscal B	8	Salazar A	9, 16
Martin L	11	Sánchez ÁF	21
McCauley M	15	Sanchez-Johnsen L	16
Medina M	23	Sandoval O	12
Mendoza C	11	San Miguel L	8
Mendoza J	17	Schmukler J	22
Merlos S	8	Schwartz A	18
Milan-Flanigan A	17	Seares M.J	22
Minier M	18	Serrano G	14
Molina Y	8	Shakoor N	10
Mora-Pinzón M	7	Shih T	15
Muñoz E	9, 23	Shirzai G	14
		Sleiman J	9, 22
N		Sodini I	10
Nava M	16	Spaggiari M	22
Ng Wong YK	9	Streber-Ramírez L	20
Nguyen H	18	Subieta G	23
0		т	
Ohly S	7	Thurin K	23
Olave-Pichón A	11	Tulla K.A	21
Ortega P	12, 13, 14, 19, 20	Tzvetanov I.G	21
Ospino K	18		
Osta A	18	U	
		Ugwu-Dike P	21
P			
Peña K	8	V	
Plana A	20	Villa M	7
Prado V.E	9		
Primeaux S	18	W	
		Williams Darrow A	17
Q			
Quezada P	13	X	
•		Xie K	17
R			
Rademaker A	16	Υ	
Ramsey-Goldman R	20	Yanez B	14
Rasgado-Flores H	13		
Rehman J	15	Z	
Rey-Mendoza J	9	Zambrano O	13
Reyes K	14		
Riad M	10		
Rivas FG	15		
Rivera L	14		
Ríos H	18		



http://www.chicagomola.com/2018/symposium2018/

All content in this abstract book including abstracts and pictures is the property of MOLA and each respective individual author.

Users are granted access, display, download and print portions, solely for their own professional non-commercial use, and always referring to the original source.

© Copyright 2018, MOLA

Design: josefragoso@fragosoart.com