

181

Identifying Racial Disparities in the Pain Management of Hidradenitis Suppurativa

Sydney Weir¹, Paul A. MacLennan PhD² and Lauren C.S. Kole³

¹University of Alabama at Birmingham Heersink School of Medicine, ²Department of Surgery, Transplantation UAB Heersink School of Medicine and ³Department of Dermatology UAB Heersink School of Medicine

OBJECTIVES/GOALS: The purpose of this study is to evaluate average pain scores in patients with Hidradenitis Suppurativa (HS) and determine if racial disparities influence HS-related pain management. **METHODS/STUDY POPULATION:** We surveyed 3,140 adult patients about demographics, HS, pain levels, medical history, and health-related quality of life. Among respondents (N=162), pain scores (0-10) were grouped as high (8+, N=54) and low (<7, N=108). We used logistic regression to calculate adjusted odds ratios (aOR) and 95% confidence intervals (95% CI). **RESULTS/ANTICIPATED RESULTS:** Respondents were female (88.9%), Black race (59.4%), with a median age of 36 (IQR 25-42) and a mean pain score of 7 (IQR 5-8). Half (48.2%) of respondents disagreed or strongly disagreed with, "I am satisfied with how my pain related to HS is being managed by my doctors." Independent risk factors for high pain included Black race (aOR=7.95, 95% CI 3.11-20.26), history of prescribed pain medications (aOR=2.37, 95% CI 1.06-5.30), and former/current tobacco use (aOR=4.12, 95% CI 1.76-9.64). **DISCUSSION/SIGNIFICANCE:** The preliminary data support the hypothesis that race influences HS-related pain. In addition, less education, a history of prescription pain medication use, and tobacco use are all independent risk factors contributing to higher pain scores in patients with HS. Further analysis will be conducted to evaluate racial influences on pain management.

182

Addressing Health Disparities through an Innovative University-Community Vaccination and Food Access Model

Carlyn Kimiecik¹, Elizabeth Crawford², Jasmine D. Gonzalvo², Megan Conklin², Susie Crowe², Kathy Hahn Keiner³, Sandra Dugan³, Jordan Smith⁴, Erik Barnett³, Sarah Estell³, Bob Williams⁵, Peter Zubler⁵, Omolola A² and Sonak Pastakia²

¹Purdue University, ²Purdue University, College of Pharmacy, Center for Health Equity and Innovation, ³Gleaners Food Bank of Indiana, ⁴Walgreens and ⁵St. Vincent de Paul, Purdue University, College of Pharmacy, Center for Health Equity and Innovation. Adeoye-Olatunde, Purdue University, College of Pharmacy, Center for Health Equity and Innovation

OBJECTIVES/GOALS: To describe and evaluate an innovative university-community vaccination and food access model for minority, immigrant, and underserved individuals experiencing food insecurity during a global pandemic. **METHODS/STUDY POPULATION:** The Purdue University Center for Health Equity and Innovation (CHEQI) partnered with the two largest food banks in the Midwest and Walgreens to offer free COVID-19 and Flu vaccinations alongside food distribution. Goals included addressing food insecurity, increasing vaccine access, and decreasing vaccine hesitancy. CHEQI acquired funding, recruited volunteers and interpreters, assessed interest and addressed vaccine hesitancy. Food

bank/pantry partners distributed food and provided access to clientele and marketing assistance. Walgreens procured, administered, and documented vaccinations. The Model accommodated drive-through and indoor processes. Unidentifiable observational and self-report data were collected. Descriptive statistics were computed to characterize program outcomes. **RESULTS/ANTICIPATED RESULTS:** A total of 11 vaccination events occurred between June and October 2021 at three food bank/pantry locations. Of these 11 events, nine (82%) were drive-through and two (18%) took place indoors, eight (72%) offered COVID-19 vaccinations only, and three (27%) offered both COVID-19 and Flu vaccinations. Food was distributed to a total of 5,108 families and 416 vaccines (314 COVID, 102 Flu) were administered. Of the 396 individuals who received at least one vaccine, 20 (5%) received both a COVID and Flu vaccine. Of the 386 individuals who received at least one vaccine and reported their sex, 194 (50%) identified as female and the average age of those who received at least one vaccine was 45 years old. Of those who reported race (N = 228) or ethnicity (N = 253), 43% identified as Black or African American and 53% identified as LatinX. **DISCUSSION/SIGNIFICANCE:** Findings offer an innovative vaccination and food access model for diverse individuals experiencing food insecurity during a global pandemic. By drawing on cost effective, accessible, and culturally contextualized practices to optimize the reach and quality of vaccination services we can improve access barriers and mitigate health disparities.

183

Advancing Structural and Systematic Equity in Epidemiological Analyses of Large Datasets

Martha L. Carvour¹

¹University of Iowa

OBJECTIVES/GOALS: Health inequities represent complex structural and systematic processes that lead to disparate outcomes for populations or subgroups within populations. This project aims to improve the available structural and systematic approaches to the study of such inequities at the population level. **METHODS/STUDY POPULATION:** Using examples from diabetes research, two critical factors that may impact the validity or utility of health equity models will be examined; and proposed methodological approaches to offsetting potentially resulting biases will be offered. The factors include: (1) inequitably missing and misclassified data in large datasets and (2) the presumed positioning of socially constructed variables such as race, ethnicity, and gender within modeled structural and systematic mechanisms. This examination intersects theories and praxis in epidemiological modeling and health equity promotion with the goal of advancing rigorous, equity-focused epidemiological methods. **RESULTS/ANTICIPATED RESULTS:** Inequitably missing and misclassified data are generally expected to obscure inequities. Treatment of missing or misclassified data as informative measures of inequity is expected to partially offset this bias. The implicitly modeled components of socially constructed variables are expected to be non-uniform across structural and systematic mechanisms of inequity. Models that apply these variables as informatively heterogeneous constructs, using multi-phase analyses to test modeling assumptions and to assess intersectionality, may provide better context about the mechanisms by which inequity has been distributed and, perhaps, by which equity may be achieved. **DISCUSSION/SIGNIFICANCE:** Equitable epidemiological methods are essential to the advancement of evidence-based health equity on