

CYFAM Research Symposium 2024, February 17-18



Thank you to our expert panel of Filipinx researchers who helped judge our symposium entries this year!

MEET THE
JUDGES



<https://tinyurl.com/CYFAMJudges>

Dr. Gene Ables
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The Research Review Process

1. Abstracts were evaluated by three judges:
 - a. the first, an expert in the primary topic;
 - b. the second, with closely related expertise;
 - c. and the third, an expert outside the field.
2. Judges independently assigned scores on a 1 to 10 scale, which were then averaged.
3. The resulting average scores were used in determining the abstract ranking.
4. Oral presenters were chosen based on presentation preference and overall score ranking.



<https://tinyurl.com/CYFAMPresenters>

Judge's choice abstract - Overall Highest Score

Unique populations of pituitary macrophages regulate reproductive hormone secretion

Zena Marie Del Mundo^{1,2}, Jocelyn Tran Ha¹, Antonia Zhang¹, Kiara Wiggins¹, Gabriela De Robles¹, Naveena Ujagar¹, Chris Garcia¹, Dequina Nicholas¹

¹*Department of Molecular Biology and Biochemistry, University of California, Irvine*

²*UCI School of Medicine, University of California, Irvine*

Abstract: Chronic inflammation disrupts hormonal balance in the Hypothalamic-Pituitary-Gonadal (HPG) axis, contributing to reproductive disorders. Despite extensive studies on immune cells in the hypothalamus and ovaries, their impact on the pituitary is largely unexplored. Our research reveals that macrophages are the primary immune population in the pituitary during homeostasis. In response to *in vivo* chronic lipopolysaccharide exposure in mice, a transient macrophage population emerges, associated with reproductive changes, including elevated serum testosterone, prolonged estrous cycle stage, and reduced ovarian antral follicle count. This study aims to characterize pituitary macrophages and elucidate their impact on the reproductive axis. We hypothesize that pituitary macrophages change inflammatory status as a response to stimuli and, as a result, modulate reproductive hormone secretion. We pinpointed differentially expressed genes (DEGs) in pituitary macrophages using scRNAseq, distinguishing them from other tissue-resident macrophages, including microglia. These DEGs include markers for macrophage activation, phagocytosis, migration, hormone synthesis, and lipid metabolism. Immunohistochemistry validated the distinctive morphology of pituitary macrophages compared to microglia. *In vitro* depletion of macrophages from mouse pituitaries resulted in decreased pituitary hormone secretion and decreased secretion of G-CSF, IL-9, and CXCL5. These results highlight the role of pituitary macrophages in hormonal regulation, setting the stage for future immunotherapeutic strategies to restore hormonal balance in reproductive disorders.

Keywords: immunology, endocrinology, reproductive disorders

Oral Presentation Session Abstracts

Oral Presentation #1

Kapwa Para Sa Kalusugang Pangkaisipan, Filipinx/a/o Community Mental Health in Action: The Filipino Young Leaders Program (FYLPRO) systematic evaluation of Filipinx/a/o community mental health and well-being in California

Mericien Venzon, PhD^{1,2}, Jaira Mendoza, BS¹, Filbert Aung^{1,3}, Kenneth Kang^{1,3}, Janeva Nicole Dimen, BA¹, Alexandra Reyes^{1,4}, Alyssa Caldito^{1,5}, Mina Sarmas^{1,3}, Alyssandra Abrenica, MD^{1,6}, Erika Acosta^{1,7,8}, Maia Eng^{1,3}, Rheanna Velasquez^{1,9}, Danielle Coquia-Guzman, MPH^{7,8#}, and Melissa L. Razon Palma, MD, MPH^{1,3#}

¹ FYLPRO Tayo, ² NYU Grossman School of Medicine, ³ Brown University, ⁴ Temple University, ⁵ University of Michigan, ⁶ Loyola University Chicago, ⁷ Filipinx/a/o Community Health Association (Fil-CHA), ⁸ University of Pennsylvania, ⁹ Ohio State University, ¹⁰ Kapwa Health Collective, # contributed equally

Abstract: Filipinx/a/o Americans (FilAms) face many strains to mental health and barriers to accessing quality mental health services. COVID-19 exacerbated these issues and created new traumas that may compound the existing toll on mental health. However, current federal policies underinvest in preventive measures that target the root causes of these mental health challenges such as social determinants of health, anti-immigrant rhetoric, and income inequality. Here, we present a community-led study investigating how mental healthcare access for multiple subgroups of FilAms has been impacted by the COVID-19 pandemic and anti-Asian hate in California. In collaboration with a coalition of community partners, a two-pronged approach was employed to acquire a comprehensive inventory of mental health services and use in California Fil-Am communities. First, a systematic review of 565 peer-reviewed articles of FilAm community mental health was performed with a focus on identifying systemic- and community-level barriers, along with facilitators of service underuse. Second, over 50 community-led mental health evaluations and programming from over 40 unique providers were surveyed. These revealed an emphasis on therapy and virtual events, and a wide breadth of services ranging from hate crime coping seminars to directories of FilAm therapists in California's major cities. Utilizing the findings of both reviews, our next steps include allying with key community partners to conduct focus groups and identify residual gaps in mental health services. This community-based participatory approach and data will allow us to more appropriately equip AA-NHPI advocacy groups with guidance and evidence for more equitable local and state policies.

Keywords: Filipinx health, mental health, community-based participatory research

Oral Presentation #2

Effectiveness of Benzydamine Hydrochloride + Cetylpyridinium Chloride (Difflam®) Lozenges in Alleviating Sore Throat among COVID-19 Patients: A Real-World Evidence Study in the Clinical Practice

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⁴ *iNova Pharmaceuticals, Philippines*

Abstract: COVID-19 infection has aggressively taken a toll on millions of lives worldwide. Recent studies have shown that newer variants consistently present with a greater frequency of sore throat. This study explored the real-world effectiveness of benzydamine hydrochloride + cetylpyridinium chloride (Difflam®) lozenge in alleviating sore throat of Filipino patients, under condition of routine medical practice. This is an observational, uncontrolled study design in ambulatory / out-patient health facilities which included patients with mild to moderate COVID-19 infection confirmed either with rapid antigen test (RAT) or positive real-time polymerase chain reaction (RT-PCR). A decreasing trend was observed in the median visual analogue scale (VAS) pain scores from baseline up to the seventh day. The difference from the baseline VAS score was significant in all observation period from day 1 to day 7 ($p < 0.001$). The greatest difference was seen on day 4 and 5 (median VAS scores of 1 and 0, respectively). The mean duration of symptoms before total resolution of sore throat (VAS score = 0) was $4.4 \text{ SD} \pm 1.9$ days with majority of participants (87 %) reporting resolution at the end of seven days observation. The mean length of time before negativity of COVID-19 RAT was $3.9 \text{ SD} \pm 1.6$ days. Majority did not experience adverse events, and if so, were generally mild. The Difflam® lozenge reduced the duration of COVID-19 (RAT negative) and completely alleviated symptoms of dysphagia and odynophagia among patients with mild to moderate COVID-19 infection within four to five days of initiation of therapy.

Keywords: COVID-19, Benzydamine Hydrochloride, Cetylpyridinium Chloride

Oral Presentation #3

Filipino-Centered Cultural Assessment of Obesity-Related Variables

**Jacob Less^{1,2}, Nicole Aniceto¹, David J Sedillo¹, Angela Rose David^{1,3},
Irma Rodas¹, Sandra L Gomez¹, Sumihiro Suzuki¹,
Annabelle Santos Volgman¹, Melissa Palma⁴, and Lisa Sanchez-Johnsen⁵**

*¹Rush University Medical Center; ²Midwestern University Arizona College of Osteopathic
Medicine; ³University of California, Los Angeles; ⁴Filipino Young Leaders Program (FYLPRO);
⁵Medical College of Wisconsin*

Abstract: Obesity is associated with 13 types of cancers and in 2014, overweight- and obesity-related cancers accounted for 40% of all cancers that were diagnosed. Moreover, significant disparities associated with obesity exist in the United States. Filipino Americans are disproportionately affected by higher obesity rates compared to other Asian American groups. Filipino immigrants are also at increased risk for hypertension and diabetes due to higher central adiposity (higher waist circumferences) and increased fat intake compared to other racial/ethnic groups. The purpose of this presentation is to describe the development of an ongoing study examining how cultural variables (e.g., acculturation, acculturative stress, ethnic identity, and cultural values) impact modifiable risk factors (e.g., diet, physical activity, body image) associated with overweight/obesity among Filipinos. The study (funded by the Charles J. and Margaret Roberts Foundation) aims to: 1) develop culturally appropriate materials and measures to assess diet, physical activity, and body image; 2) examine the feasibility and acceptability of questionnaires administered during interviews; and 3) obtain pilot data that can be used to guide a future study. In partnership with the Filipino Young Leaders Program and the Filipino Health Community Advisory Board members, we will enroll 25 Filipino Americans and immigrants, ages 18-65, with a BMI ≥ 18.5 kg/m². Participants will complete objective measures (weight, height, body fat) and an interview focused on health, culture, diet, physical activity, and body image. Increased understanding of the impact of cultural factors on health behaviors will help inform future interventions tailored to Filipino Americans.

Key Words: Obesity, Cancer Risk, Culture, Filipino

Oral Presentation #4

Advancing the Science of Recruitment in Clinical Research: Focus on Asian American Native Hawaiian Pacific Islander (AANHPI) Youth

Julia Noelani Joo¹, Joyce Rivera Javier MD, MPH, MS, FAAP²

¹Crescenta Valley High School, ²Children's Hospital Los Angeles, University of Southern California Keck School of Medicine

Abstract: Background: From 1992-2018, 0.17% of the funding allocated by the National Institutes of Health focused on Asian American Native Hawaiian Pacific Islander (AANHPI) populations. This paucity of research funding has implications on the well-being of AANHPI communities, especially their youth. Without sufficient clinical research, AANHPIs remain conspicuously absent from research findings and health interventions. The psychology of persuasion provides valuable insights into the principles that influence human behavior, including the factors that impact enrollment in clinical research. The objective of this study is to determine which persuasive technique is more effective in encouraging AANHPI youth to enroll in clinical research studies. Hypothesis: We hypothesize that the persuasive technique of fear appeal will be more effective in increasing intention to enroll in a research study focused on suicide prevention among AANHPIs compared to the use of authority. Methods: This study uses a randomized controlled 2-arm pretest-posttest online survey design. AANHPI youth, ages 13-18 were recruited via word-of-mouth, in-person outreach, and social media. Participants are randomly allocated to view either a flyer using fear appeal (Group A) versus authority (Group B). Measures included: demographics, attitudes toward clinical research, and intention to enroll (primary outcome). T-tests and analysis of variance will be used to identify differences between the two groups. Results: 32 participants have been recruited thus far. Table 1 displays demographics by group. Implications: Addressing the underrepresentation of AANHPI youth in clinical research will lead to a more equitable and inclusive healthcare environment and will promote the overall well-being of this demographic.

Keywords: recruitment, Asian American Native Hawaiian & Pacific Islander, youth

Poster Presentation Session Abstracts

Poster 1

Factors in Influencing Step 2 CK Success: Shelf Exams

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Abstract: The United States Medical School Licensing Exam Step 2-CK (Clinical Knowledge) is a board exam all US MD medical students must take in order to graduate medical school. Unlike USMLE Step 1 (a pass/fail exam), USMLE Step 2 CK is graded on a three-digit numerical score. Preparing for USMLE Step 2 CK takes time as a student accumulates knowledge throughout their clinical rotations. Traditionally, after students complete core rotations (e.g. general surgery, internal medicine, etc.), the student must take a shelf exam written by the National Board of Medical Examiners. This research project aims to identify whether there is a significant correlation between shelf exam performance and Step 2 CK scores. To answer this question, de-identified data from the Class of 2024 at the Kirk Kerkorian SOM was used (n=64). SPSS was used to generate correlations between Step 2 scores and the following factors: internal medicine shelf exam grades, shelf percentile averages, and mean shelf score. Through this, it was noted that there is a significant positive correlation between these markers and Step 2 performance ($p < 0.05$). Research is still ongoing for this question as we plan to gather more data from multiple classes to increase our sample size. We are also working on identifying a possible correlation with time spent towards dedicated studying. Identifying these factors that influence Step 2 CK performance will be helpful for medical educators to identify students at risk for not passing as well as help students gauge their own trajectory towards this crucial exam.

Keywords: Medical Education, Step 2

Poster 2

Gender moderates social media use's effect on psychological distress in California young adults

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Abstract: Given the high prevalence of social media use among young adults, recent research has pointed to social media's influence on mental health outcomes. However, a deeper understanding of the mechanisms that underlie this association is still needed to identify key target variables for interventions. We used the secondary data from the 2019 California Health Interview Survey (CHIS) public use file to conduct weighted multivariable logistical regression analysis. We selected for individuals between 18 to 25 years old to examine young adults' experiences. Multivariate models looked at frequency of social media use as the exposure and psychological distress as measured using the Kessler-6 distress scale as the outcome. Gender, race/ethnicity, poverty, self-reported health status, marital status, insurance status, educational attainment, and obesity were included as covariates. While we found a significant correlation between social media and psychological distress, this association was similarly significant after the inclusion of an interaction term combining gender with social media use. This suggests that gender plays a moderating role. Among females, frequent social media users had higher odds of psychological distress compared to nonfrequent users. On the other hand, male frequent social media users had lower odds of psychological distress compared to male non-frequent users. These epidemiological findings demonstrate how gender differentially impacts the effect of social media use on psychological distress as it relates to one's gender. Future research should further examine how different uses of social media (e.g., posting, scrolling) and other sociocultural factors may influence the moderating effect of gender.

Keywords: social epidemiology, mental health, biostatistics, health disparities

Poster 3

Relationship between social networks and perceived stress across income levels among U.S. Filipino migrants 1-year post-migration

Christopher Cedric Bautista¹, Angela Rose David¹, Elaika Janin Clemen¹, and Gilbert C. Gee¹

¹Health of Philippine Emigrants Study (HoPES) at the University of California, Los Angeles

Abstract: Migration is a “transplantation” experience that engenders profound changes in an individual’s life and a stressful and extensive process of acculturation that has significant health consequences. As a result, immigrants rely on social networks for social support to reroot in their new society. Previous literature has shown that having larger social networks serve as a protective factor that reduces stress and lessens the deleterious effects of immigration on health. However, only very few studies explore this relationship among Filipino migrants. In this study, we examine the relationship between perceived stress and social networks among Filipino migrants in the USA by analyzing one-year post-migration data from the Health of Philippine Emigrant Study. We hypothesized that having a larger social network size (corresponding to higher Social Network Index) is associated with reduced perceived stress (measured by Cohen’s Perceived Stress Scale). In the context of the rapidly growing population of Filipino immigrants in the USA and the rising cases of mental health issues among Filipino immigrants, this study becomes important in further understanding Filipino immigrant health and informing public health and immigration policies that specifically target Filipinos.

Keywords: Immigrant Health, Social Network, Stress

Poster 4

Anxiety Comorbidity and Pharmacology in Black and Hispanic Dermatology Patients: A Retrospective Study

Liana Ysabel A. Bautista B.S.^{1,2}, Vik Patel, M.D.³, Sacharitha Bowers, M.D.³, Tony Tu M.D. Ph.D.⁴

Loyola University Chicago Stritch School of Medicine¹, Loyola University Chicago Center for Community and Global Health², Loyola Medicine Department of Dermatology³, Loyola Medicine Department of Psychiatry⁴

Abstract: Background: While extensive research has demonstrated correlations between anxiety and skin disorders, studies are limited in communities of color. This study examines the pharmacological burden of anxiety stemming from dermatological disease in Black and Hispanic patients from a hospital system serving urban minority populations.

Aims:

1. Assess the burden of co-existing anxiety and dermatological disease in Black and Hispanic outpatient dermatology patients.
2. Assess the pharmacological trends in psychiatric medication use in Black and Hispanic outpatient dermatology patients with anxiety.

Methods: This is a retrospective review of Loyola Medicine Dermatology visits between September 2013 and September 2023. Patients were included if they were ≥ 18 years old, Black and/or Hispanic, and had documented ICD-10 codes L00-L99 for skin disease or C44 for malignant skin neoplasms and F40-F48 for anxiety. Data extracted psychiatric diagnoses, dermatologic diagnoses, and psychiatric therapies.

Results: A total of 2,215 charts are still being reviewed. While results will be finalized at time of presentation, we can draw from current literature to hypothesize that at least 30% of Black/Hispanic Dermatology patients were diagnosed with anxiety. The most common dermatologic comorbidities were seborrheic dermatitis, atopic dermatitis, and acne vulgaris.

Though there will not be any statistical difference between Black/Hispanic and White/Non-Hispanic patients' anxiolytic prescription, Black/Hispanic patients will be less likely to be offered and/or accept psychotherapy.

Implications: Inequities in anxiety treatment among Black and Hispanic patients highlight the need to address culturally-competent mental health care. Further qualitative research is necessary to explore specific interventions.

Keywords: minority mental health disparities, anxiety, skin disease

Poster 5

Unique populations of pituitary macrophages regulate reproductive hormone secretion

Zena Marie Del Mundo^{1,2}, Jocelyn Tran Ha¹, Antonia Zhang¹, Kiara Wiggins¹, Gabriela De Robles¹, Naveena Ujagar¹, Chris Garcia¹, Dequina Nicholas¹

¹*Department of Molecular Biology and Biochemistry, University of California, Irvine*
²*UCI School of Medicine, University of California, Irvine*

Abstract: Chronic inflammation disrupts hormonal balance in the Hypothalamic-Pituitary-Gonadal (HPG) axis, contributing to reproductive disorders. Despite extensive studies on immune cells in the hypothalamus and ovaries, their impact on the pituitary is largely unexplored. Our research reveals that macrophages are the primary immune population in the pituitary during homeostasis. In response to *in vivo* chronic lipopolysaccharide exposure in mice, a transient macrophage population emerges, associated with reproductive changes, including elevated serum testosterone, prolonged estrous cycle stage, and reduced ovarian antral follicle count. This study aims to characterize pituitary macrophages and elucidate their impact on the reproductive axis. We hypothesize that pituitary macrophages change inflammatory status as a response to stimuli and, as a result, modulate reproductive hormone secretion. We pinpointed differentially expressed genes (DEGs) in pituitary macrophages using scRNAseq, distinguishing them from other tissue-resident macrophages, including microglia. These DEGs include markers for macrophage activation, phagocytosis, migration, hormone synthesis, and lipid metabolism. Immunohistochemistry validated the distinctive morphology of pituitary macrophages compared to microglia. *In vitro* depletion of macrophages from mouse pituitaries resulted in decreased pituitary hormone secretion and decreased secretion of G-CSF, IL-9, and CXCL5. These results highlight the role of pituitary macrophages in hormonal regulation, setting the stage for future immunotherapeutic strategies to restore hormonal balance in reproductive disorders.

Keywords: immunology, endocrinology, reproductive disorders

Poster 6

Correlational Study Between Meteorological Variables and Selected Vector-Borne Diseases in the 2nd Decade of the 21st Century in the Philippines

Franc Ison P. Dy¹, Angelija Uriel A. Echiverri¹, **Diether Rafael E. Elbangcol¹**, Gabriel V. Encanto¹, Cherry Anne B. Esperanza¹, Angeleen S. Esporlas¹, Paula Nicole O. Estrada¹, Tricia Anne C. Farnacio¹, Michael Irvin S. Faune¹, Dr. Jennifer M. Naites MD, MSPH², Dr. Gemiliano Aligui MD, MPH, PhD^{1,3}

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Abstract: Meteorological variables including temperature, precipitation, and rainfall are crucial for disease transmission by vectors. Malaria, dengue, and filariasis are the main diseases that continue to inflict disaster on the nation's healthcare system among other vector-borne illnesses. This study examined the possible link between climate change and vector-borne illnesses in the Philippines. We employed an exploratory data analysis on retrospective data to investigate the correlation and patterns of relationships between reported cases of dengue, malaria, and filaria with climate data. The secondary data was obtained from DOH comparison of 2009-2020 positive cases of vector-borne diseases including dengue, malaria, and filariasis. In addition, secondary data was also obtained from PAGASA, consisting of temperature, precipitation or rainfall, and humidity from 2009-2020. The study showed that there is no consistent correlation between the climatological factors and reported cases of dengue, malaria, and filaria. Our findings imply that there are limitations that need to be addressed in order to provide a better approximation and modeling of relationships. While studies have indeed shown that vector-borne diseases can be modeled with climate data, the assumptions by which the data were collected is critical to make any definitive findings with Philippine data. Understanding the nature of relationships between vector-borne diseases and climate data at the local setting, can help prepare the ground for proactive measures in mitigating the effects of climate on these diseases.

Keywords: Meteorological Variables, Vector-Borne Diseases, Climate Change

Poster 7

Racial Disparities in the Utilization of Total Knee Arthroplasty for Surgical Treatment of Knee Osteoarthritis

Luigi Gonzales BS¹, Jared Lyons BS¹, Angelaiza Obedoza BS², Luke Gonzales³, Behnoosh Afghani MD¹

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Abstract: Total Knee Arthroplasty (TKA) is a surgical procedure that has been shown to improve quality of life for patients with osteoarthritic knee(s). A better understanding of utilization of TKA in different populations based on the disease burden is needed. Our objective was to determine if there are racial disparities in the utilization of TKA among patients with knee osteoarthritis. A literature review was conducted through PubMed and Google Scholar databases using specified keywords such as “disparities”, “racial”, “knee pain” “total knee arthroplasty”, and “knee replacement”. We included studies that evaluated pain prior to surgery, TKA utilization, and included race/ethnicity. The studies indicated that Black and Hispanic patients with knee osteoarthritis were significantly less likely to receive a total knee arthroplasty when compared to White patients, despite their higher baseline pain scores. These results remained true even after accounting for some of the confounding variables (Table 1). However, the use of confounding variables was not consistent among the studies. Our literature review suggests that there are racial inequities in the utilization of TKA in patients presenting with knee osteoarthritis. Although minority patients presented with higher levels of pain, they were less likely to undergo TKA. Potential factors in this discrepancy are the lack of TKA education, mistrust in the medical system, and ability to afford surgery and post-operative care as well as cultural/language barriers that were not included in all studies. Further research is needed to develop targeted interventions to eliminate factors behind the racial disparity and evaluate the impact on outcomes.

Keywords: racial disparity, knee osteoarthritis, total knee arthroplasty, knee pain

Poster 8

Investigating sources of influenza antigen seniority during the adaptive immune response in tonsil organoids

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Abstract: Although the seasonal influenza (flu) vaccine can reduce the severity of flu infection by 40-60%, annual re-vaccination is still needed to provide optimal protection against exposure to drifted or shifted variants. Drifted strains are a result of mutations in the immunodominant head domain of the influenza surface protein, hemagglutinin (HA). In response to flu vaccine antigens, naive B cells in the draining lymph node either differentiate into antibody-secreting plasmablasts or HA-specific memory B cells. Repeated vaccination or exposure to flu antigens builds immune memory that can be cross-reactive to antigenically similar strains. Paradoxically, pre-existing immune memory can also inhibit the generation of new, potentially more protective responses from the naive B cell pool, thus leading to poor antibody diversification. Called “antigen seniority”, this concept argues that early-life virus exposure is a dominant factor in shaping the quality of future responses to drifted viruses. However, it remains unclear whether the source of the initial influenza exposure (vaccination or infection) has an impact on subsequent antibody diversity and protection. In this study, we will use a tonsil organoid platform that we have previously shown to effectively model adaptive immunity observed in vivo during vaccination. We aim to determine if primary viral infection or vaccination leads to differences in the propensity to develop robust, protective immune responses to future flu exposures. Results from this study will inform future flu vaccine formulation and development, and whether primary antigen exposure through viral infection or vaccine is more efficient in inducing a broadly protective immune repertoire.

Keywords: influenza, organoid, germinal center, adaptive immunity

Poster 9

Advancing the Science of Recruitment in Clinical Research: Focus on Asian American Native Hawaiian Pacific Islander (AANHPI) Youth

Julia Noelani Joo¹, Joyce Rivera Javier MD, MPH, MS, FAAP²

¹Crescenta Valley High School, ²Children's Hospital Los Angeles, University of Southern California Keck School of Medicine

Abstract: Background: From 1992-2018, 0.17% of the funding allocated by the National Institutes of Health focused on Asian American Native Hawaiian Pacific Islander (AANHPI) populations. This paucity of research funding has implications on the well-being of AANHPI communities, especially their youth. Without sufficient clinical research, AANHPIs remain conspicuously absent from research findings and health interventions. The psychology of persuasion provides valuable insights into the principles that influence human behavior, including the factors that impact enrollment in clinical research. The objective of this study is to determine which persuasive technique is more effective in encouraging AANHPI youth to enroll in clinical research studies. Hypothesis: We hypothesize that the persuasive technique of fear appeal will be more effective in increasing intention to enroll in a research study focused on suicide prevention among AANHPIs compared to the use of authority. Methods: This study uses a randomized controlled 2-arm pretest-posttest online survey design. AANHPI youth, ages 13-18 were recruited via word-of-mouth, in-person outreach, and social media. Participants are randomly allocated to view either a flyer using fear appeal (Group A) versus authority (Group B). Measures included: demographics, attitudes toward clinical research, and intention to enroll (primary outcome). T-tests and analysis of variance will be used to identify differences between the two groups. Results: 32 participants have been recruited thus far. Table 1 displays demographics by group. Implications: Addressing the underrepresentation of AANHPI youth in clinical research will lead to a more equitable and inclusive healthcare environment and will promote the overall well-being of this demographic.

Keywords: recruitment, Asian American Native Hawaiian & Pacific Islander, youth

Poster 10

Filipino-Centered Cultural Assessment of Obesity-Related Variables

Jacob Less^{1,2}, **Nicole Aniceto**¹, David J Sedillo¹, **Angela Rose David**^{1,3},
Irma Rodas¹, Sandra L Gomez¹, Sumihiro Suzuki¹,
Annabelle Santos Volgman¹, Melissa Palma⁴, and Lisa Sanchez-Johnsen⁵

¹*Rush University Medical Center;* ²*Midwestern University Arizona College of Osteopathic Medicine;* ³*University of California, Los Angeles;* ⁴*Filipino Young Leaders Program (FYLPRO);* ⁵*Medical College of Wisconsin*

Abstract: Obesity is associated with 13 types of cancers and in 2014, overweight- and obesity-related cancers accounted for 40% of all cancers that were diagnosed. Moreover, significant disparities associated with obesity exist in the United States. Filipino Americans are disproportionately affected by higher obesity rates compared to other Asian American groups. Filipino immigrants are also at increased risk for hypertension and diabetes due to higher central adiposity (higher waist circumferences) and increased fat intake compared to other racial/ethnic groups. The purpose of this presentation is to describe the development of an ongoing study examining how cultural variables (e.g., acculturation, acculturative stress, ethnic identity, and cultural values) impact modifiable risk factors (e.g., diet, physical activity, body image) associated with overweight/obesity among Filipinos. The study (funded by the Charles J. and Margaret Roberts Foundation) aims to: 1) develop culturally appropriate materials and measures to assess diet, physical activity, and body image; 2) examine the feasibility and acceptability of questionnaires administered during interviews; and 3) obtain pilot data that can be used to guide a future study. In partnership with the Filipino Young Leaders Program and the Filipino Health Community Advisory Board members, we will enroll 25 Filipino Americans and immigrants, ages 18-65, with a BMI ≥ 18.5 kg/m². Participants will complete objective measures (weight, height, body fat) and an interview focused on health, culture, diet, physical activity, and body image. Increased understanding of the impact of cultural factors on health behaviors will help inform future interventions tailored to Filipino Americans.

Key Words: Obesity, Cancer Risk, Culture, Filipino

Special Category: This is a Filipino-focused research study. The study focuses on understudied areas in Filipino health- obesity, diet, and physical activity. We will conduct this study in partnership with the Filipino Young Leaders Program (FYLPRO) and the Filipino Health Community Advisory Board (FH-CAB), which has been assembled for this study. Our community partner (FYLPRO) and the FH-CAB will assist with the design, development, implementation, and dissemination of the findings of this study.

Poster 11

Understanding asthma health disparities and the effect of acculturation among Filipino Americans

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¹California University of Science and Medicine

Abstract: Filipino-Americans experience a high burden of chronic disease, however, asthma disparities remain understudied. Here, we aim to evaluate disparities in asthma among Filipinos and understand the effect of acculturation on asthma prevalence. Data from the California Health Interview Survey (2019-2020) was used to assess asthma prevalence, outcomes, and management, and estimate the association between acculturation and asthma prevalence among Filipinos. Multivariable analysis on SPSS calculated significance using Fisher's exact test. Across Asian subgroups, Filipinos had significantly higher asthma prevalence rates (17.7%, $p < 0.0001$). Among Filipinos with asthma, there was no difference in the prevalence of asthma attacks in the past year (23.0%, $p = 0.10$), access to an asthma management plan from a healthcare professional (59.2%, $p = 0.07$), and adherence to daily management medication (30.4%, $p = 0.08$) when compared to the total Asian population. However, analysis of nativity, citizenship, and English proficiency revealed that higher levels of acculturation were associated with a significantly greater asthma prevalence in Filipinos. Filipinos that only spoke English were significantly more likely to have asthma compared to those that spoke English well (22.9% vs. 13.7%, $p = 0.0001$). Filipinos aged 40-64 who spent 81%+ of their life in the U.S. had significantly higher asthma rates compared to those who have spent 41-80% (22.6% vs. 11.4%, $p = 0.006$). This data suggests that Filipinos with asthma experience discrepancies in healthcare intervention compared to other Asian subgroups despite having a higher disease burden and that acculturation is positively associated with asthma prevalence. Future interventions that are tailored for Filipinos should address acculturation effects on asthma health.

Keywords: Asthma, Immigrant Health, Acculturation

Poster 12

An Online Resource of Filipino-Inspired Recipes for Health Promotion and Education

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Abstract: Findings from disaggregated data have shown that among Asians, Filipino Americans (FAs) have higher years of lives lost from ischemic heart disease and cerebrovascular disease. While the reasons for high risk to cardiovascular disease are multifactorial, diet has often been cited as a leading contributor. In FA populations, a high intake of sugar, salt, and fat has been reported. Self-management of diet among FAs is hindered by stigma of disease and cultural attachments of foods. Furthermore, there are few online resources to help modify the specific diet of FAs. The purpose of this study is to create an accessible resource of healthy recipes and cardiovascular health education that is culturally tailored to FAs. Filipino dishes from published cookbooks and recipe websites were curated. Literature on FA health disparities and nutrition were also reviewed. Website pages were written for no higher than an eighth-grade reading level and measured for readability using Flesch Reading Ease and Flesch-Kincaid Grade Level scores. A website “Tikman Healthy Kitchen” was designed to highlight recipes of Filipino dishes that are health-oriented (e.g., low sodium, carbohydrate-controlled). Examples of dishes include kalabasa, oats-caldo (arroz caldo with oatmeal instead of rice), and ginisang munggo (a mung bean stew with vegetables). The website also features articles on diabetes, hypertension, obesity, and evidence-based dietary recommendations to educate and empower visitors. This online resource complete with recipes and educational material may be useful for health promotion in FAs. Future directions of the project include assessment of website engagement using surveys and marketing strategies.

Keywords: Filipino Americans; nutrition; cardiovascular disease

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Increasing Urine Drug Screening Compliance Following the Return to In-Person Visits

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Abstract: Urine Drug Screenings (UDS) are an integral part of pain management that enable healthcare providers to monitor patients' use of prescribed medications and to detect the use of illicit substances. Drug testing is part of risk stratification prior to starting opioid therapy and provides an objective measure of compliance, helping providers identify potential issues with medication abuse or misuse. The COVID-19 pandemic had a significant impact on the administration of UDS. Upon transitioning back to in-person visits, UDS compliance notably decreased. This study aimed to investigate the efficacy of implementing new patient-physician agreement forms, which served to clearly outline the importance of UDS compliance and the expectations for all patients prescribed a controlled substance, in improving clinic UDS compliance rates. Compliance data compared compliance rates prior to the implementation of the new agreement forms (May to June 2022) and after their implementations (September to October 2022). In the pre-intervention period, 18 out of the 62 patients were compliant, with a compliance rate of 29.03%. In the post-intervention period, 29 out of the 38 patients were compliant, with a rate of 76.32%. Using a chi-squared test, the p-value was found to be less than 0.001%. Given a significance level of 0.05%, evidence suggests that informed, clearly communicated agreement forms increased UDS compliance. As physicians transition back to in-person visits, these quality improvement measures can be helpful tools for bettering patient-physician communication and providing higher-quality care.

Keywords: Quality improvement, Pain Management, Urine Drug Screenings (UDS)

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Access to surgical treatment for hepatopancreaticobiliary cancer in the Philippines

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Abstract: Hepatopancreaticobiliary cancers are among the most diagnosed cancers in the world. However, although high-income countries have the highest incidence rates, low- and middle-income countries have the highest mortality rates. In this article, we describe the geographic distribution of board-certified hepatopancreaticobiliary surgeons who provide surgical management for patients with these diseases in the Philippines. We draw attention to the geographic disparities in the distribution of these surgeons and the other factors that contribute to the lack of access. Lastly, we formed suggestions that would work towards rectifying this imbalance in the country. Research focused on Hepatopancreaticobiliary cancers need to be supported and at the same time, formation of supportive government policy is vital in order to ensure equitable access to treatment.

Keywords: Accessibility to Surgical treatment, Hepatopancreaticobiliary cancers, Philippines

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Oral Health Curriculum for Peer Health Educators of a Seven College Consortium

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Abstract: Oral health (OH) often goes overlooked and can result in painful and costly treatment. Young adults have the opportunity to build healthy habits and prevent oral disease through education and resources. The college lifestyle presents risk factors for OH, including stress, poor diet, alcohol and tobacco use, and lack of care from a dental provider. There was a limited priority focus on OH at a campus health center in Claremont, CA. Although general health resources were available, no resources focused on OH and hygiene were offered on campus. A capstone project created an OH promotion initiative that partnered with the Health Education Outreach program to develop dental education materials, distribute oral hygiene resources, and introduce OH as a vital component of overall health. An evidence-based and culturally competent curriculum has been developed to train peer health educators (n=4) on dental hygiene recommendations, OH risks specific to college students, and other considerations like navigating dental insurance and on-campus resources. The peer health education model has proven to be an effective health promotion tool on many campuses. The initiative consists of a two-hour training session and pre-/post-surveys to evaluate the effectiveness of the training, collect participant feedback, and observe changes in knowledge and skills. Our results aim to inform future emphasis on OH for college students and health programming. Peer health educators with a comprehensive skill set that includes OH promotion to seize a unique opportunity to elevate community wellness.

Keywords: Dental Public Health, Peer Health Education, College Student Health

Poster 16

Effectiveness of Benzydamine Hydrochloride + Cetylpyridinium Chloride (Difflam®) Lozenges in Alleviating Sore Throat among COVID-19 Patients: A Real-World Evidence Study in the Clinical Practice

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Abstract: COVID-19 infection has aggressively taken a toll on millions of lives worldwide. Recent studies have shown that newer variants consistently present with a greater frequency of sore throat. This study explored the real-world effectiveness of benzydamine hydrochloride + cetylpyridinium chloride (Difflam®) lozenge in alleviating sore throat of Filipino patients, under condition of routine medical practice. This is an observational, uncontrolled study design in ambulatory / out-patient health facilities which included patients with mild to moderate COVID-19 infection confirmed either with rapid antigen test (RAT) or positive real-time polymerase chain reaction (RT-PCR). A decreasing trend was observed in the median visual analogue scale (VAS) pain scores from baseline up to the seventh day. The difference from the baseline VAS score was significant in all observation period from day 1 to day 7 ($p < 0.001$). The greatest difference was seen on day 4 and 5 (median VAS scores of 1 and 0, respectively). The mean duration of symptoms before total resolution of sore throat (VAS score = 0) was $4.4 \text{ SD} \pm 1.9$ days with majority of participants (87 %) reporting resolution at the end of seven days observation. The mean length of time before negativity of COVID-19 RAT was $3.9 \text{ SD} \pm 1.6$ days. Majority did not experience adverse events, and if so, were generally mild. The Difflam® lozenge reduced the duration of COVID-19 (RAT negative) and completely alleviated symptoms of dysphagia and odynophagia among patients with mild to moderate COVID-19 infection within four to five days of initiation of therapy.

Keywords: COVID-19, Benzydamine Hydrochloride, Cetylpyridinium Chloride

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Feasibility of Peer-based Action Observation in Post-amputation Rehabilitation Programs

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Abstract: In the United States, the number of patients undergoing a lower limb amputation (LLA) is steadily growing. As these patients typically experience functioning deficits such as increased fall risk, it is important to assess the efficacy of post-amputation rehabilitation on patient outcomes, including fall risk, motor function, and physical health-related quality of life. The purpose of our study is to examine the effect of peer-based action observation (i.e. amputees observing other amputees) in the learning of motor skills, which is a common support system for those with LLA. Data was first collected in both younger and older adults without LLA. Differences in visual focus when observing task demonstration videos (i.e. balance and fall recovery tasks) by amputees vs. non-amputees were measured via eye tracking. After watching the videos, participants were asked to practice the balance/fall recovery tasks. Statistically significant improvements were found in balance performance (via longer time-in-balance duration and minimization of stabilometer angle tilt) and self-efficacy rating (via improved self confidence in balancing ability) after practice. Eye tracking data showed more visual attention on the non-prosthetic leg for amputee videos, and the non-prosthetic leg/stabilometer for non-amputee videos. Thus, similarity of the model may have implications on more efficient methods for action planning. The results suggest that action observation as a part of balance/fall recovery training may offer a feasible method for skill acquisition. This study established the feasibility of an experimental protocol for studying the efficacy of peer-based action observation in individuals with LLA.

Keywords: rehabilitation, balance, fall

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Intentional Self-Harm Mortality Among 15-24 Year Olds in Asian American Subgroups, 2011-2020

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Abstract:

Objectives: Suicide is the primary cause of death among Asian American (AA) youth aged 15-24 between 2011 and 2020. However, lack of data disaggregation between AA subgroups hinders a comprehensive understanding of this statistic.

Methods: This cross-sectional study extracted U.S. death certificate data from the National Vital Statistics System for 15-24-year-olds from 2011-2020. 39861 suicides were extracted, retaining sex, age group, nativity status, location of death, and race, encompassing six Asian American subgroups and non-Hispanic White. Using the 2010 US standard population, age-standardized mortality rates (ASMR) were calculated, adjusting for age, sex, and disaggregated Asian subgroups. Proportional Mortality (PM), Proportional Mortality Ratios (PMR), and Joinpoint regression analyses were calculated for each AA subgroup using RStudio.

Results: Analysis of PM reveals similar trends between aggregated Asian American and NHW youth suicide rates, increasing from 2011-2018 and slightly declining from 2018-2020. Disaggregated, Korean PM exceeds NHW PM in 2018 and 2019, and Japanese PM exceeds NHW PM in 2020. Filipino, Japanese, Vietnamese and White native-born youths were more likely to complete suicides than foreign born counterparts. Joinpoint regression analyses show a steady rise in Filipino suicide deaths from 2011-2020 a decline in Asian Indian and Chinese suicide deaths from 2015-2020, and a dramatic increase in Japanese suicide deaths from 2018-2020.

Conclusions: This study found that suicide rates for AA youth vary greatly when disaggregated by Asian subgroup. Notably, Japanese American suicide deaths have increased nearly five-fold from 2018-2020. Our results call for targeted suicide prevention among the vulnerable population.

Keywords: Intentional self-harm, Suicide, Asian American, Youth, Mental Health, Mortality, Ethnicity

Poster 19

Kapwa Para Sa Kalusugang Pangkaisipan, Filipinx/a/o Community Mental Health in Action: The Filipino Young Leaders Program (FYLPRO) systematic evaluation of Filipinx/a/o community mental health and well-being in California

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Abstract: Filipinx/a/o Americans (FilAms) face many strains to mental health and barriers to accessing quality mental health services. COVID-19 exacerbated these issues and created new traumas that may compound the existing toll on mental health. However, current federal policies underinvest in preventive measures that target the root causes of these mental health challenges such as social determinants of health, anti-immigrant rhetoric, and income inequality. Here, we present a community-led study investigating how mental healthcare access for multiple subgroups of FilAms has been impacted by the COVID-19 pandemic and anti-Asian hate in California. In collaboration with a coalition of community partners, a two-pronged approach was employed to acquire a comprehensive inventory of mental health services and use in California Fil-Am communities. First, a systematic review of 565 peer-reviewed articles of FilAm community mental health was performed with a focus on identifying systemic- and community-level barriers, along with facilitators of service underuse. Second, over 50 community-led mental health evaluations and programming from over 40 unique providers were surveyed. These revealed an emphasis on therapy and virtual events, and a wide breadth of services ranging from hate crime coping seminars to directories of FilAm therapists in California's major cities. Utilizing the findings of both reviews, our next steps include allying with key community partners to conduct focus groups and identify residual gaps in mental health services. This community-based participatory approach and data will allow us to more appropriately equip AA-NHPI advocacy groups with guidance and evidence for more equitable local and state policies.

Keywords: Filipinx health, mental health, community-based participatory research