

**U.S. Department of Health and Human Services
National Institutes of Health
National Institute on Minority Health and Health Disparities
55th Meeting of the
National Advisory Council on Minority Health and Health Disparities**

Virtual Meeting

September 4, 2020

Open Session

11:00 a.m. – 4:30 p.m. EDT

Meeting Minutes

Council Members Present

Eliseo J. Pérez-Stable, MD, Chairperson; Director, NIMHD
Lisa L. Barnes, PhD, Rush University Medical Center
Neil S. Calman, MD, Icahn School of Medicine at Mount Sinai
Marshall H. Chin, MD, MPH, FACP, University of Chicago
Giselle M. Corbie-Smith, MD, MS, University of North Carolina at Chapel Hill
Kimberly S. Johnson, MD, Duke University Medical Center
Joseph Keawe'aimoku Kaholokula, PhD, University of Hawaii at Manoa
Matthew Lin, MD, Retired
Spero M. Manson, PhD, MA, University of Colorado Denver
Brian Mustanski, PhD, MA, Northwestern University
Joan Y. Reede, MD, MS, MPH, MBA, Harvard Medical School
Kenneth A. Resnicow, PhD, University of Michigan
William M. Southerland, PhD, Howard University
Carmen Zorrilla, MD, University of Puerto Rico

Council Members Absent

Amelie Ramirez, DrPH, MPH, BS, University of Texas Health Science Center

Ex Officio Members Present

Judith A. Long, MD, VA Center for Health Equity Research and Promotion
Donald Shell, MD, MA, Office of the Assistant Secretary of Defense for Health Affairs

Representatives Present

William Riley, PhD, Office of Behavioral and Social Sciences Research

Executive Secretary

Joyce A. Hunter, PhD

Presenters

Priscilla Grant, JD, Chief Grants Management Officer, Grants Management Branch, OERA, NIMHD

Monica Webb Hooper, PhD, Deputy Director, NIMHD

Brian Mustanski, PhD, MA, Northwestern University

Benyam Hailu, MD, Program Official, Clinical and Health Services Research, NIMHD

Derrick Tabor, PhD, Program Official, Integrative Biological and Behavioral Sciences Research, NIMHD

Beda Jean-Francois, PhD, Program Official, Clinical and Health Services Research, NIMHD

CALL TO ORDER AND WELCOME

Dr. Pérez-Stable, Director of the National Institute on Minority Health and Health Disparities (NIMHD), called to order the Open Session of the 55th meeting of the National Advisory Council on Minority Health and Health Disparities (NACMHD) at 11:00 a.m.

ROLL CALL, MINUTES REVIEW

Dr. Hunter called the roll. Council members and others present introduced themselves and their affiliations. Dr. Hunter brought the May 2020 meeting minutes before the Council, calling for a motion to approve them. The Council unanimously approved the minutes of the May 2020 Council meeting.

NIMHD DIRECTOR'S REPORT AND DISCUSSION

Dr. Pérez-Stable provided the report on activities relevant to NIMHD since the May meeting.

General Updates

- Colleagues at the NIH and in the field of psychology remembered Dr. James Jackson, a clinical psychologist who founded the Program for Research on Black Americans with the objectives to address the need for high quality national data on African Americans and to provide research and training opportunities for social scientists and students of color. Dr. Jackson was a leader in academia and

served on numerous committees and organizations including: National Academy of Medicine; Institute for Social Research, and the Center for African American Studies (UM); PI on the National Survey of Black Americans; Past President of the Association of Black Psychologists, and the Society for the Psychological Study of Social Issues; National Science Board; National Advisory Council (NIA); and Ad Hoc Member for the NIMHD Advisory Council. NIMHD has lost a friend.

- Dr. Rick Woychik, who served as the Acting Director of the National Institute of Environmental Health Sciences (NIEHS) since October 2019, officially began his role as the NIEHS Director on June 7, 2020. Since 2010, he served as NIEHS Deputy Director where he led the institute's strategic planning exercises and guided implementation of plans across a broad range of scientific disciplines. He is highly respected for his accomplishments in mammalian genetics and his contribution to developing the field of environmental epigenetics.
- Dr. Shannon Zenk has been appointed as the Director of the National Institute of Nursing Research (NINR). Formerly, she was the Nursing Collegiate Professor in the Department of Population Health Nursing Science at the University of Illinois. Her research focuses on social inequities and health and aims to identify effective, multi-level approaches to improve health and eliminate racial/ethnic and socioeconomic health disparities. Dr. Zenk was elected as a fellow of the American Academy of Nursing in 2013 and was inducted into the International Nurse Researchers Hall of Fame in 2019. Her intramural lab will be hosted by the NIMHD Division of Intramural Research.
- Dr. Michael Chiang is expected to begin his new role as the Director of the National Eye Institute in late 2020. He comes to NIH from Oregon Health Sciences University (OHSU). At OHSU, he was a Knowles Professor of Ophthalmology and Medical Informatics and Clinical Epidemiology. Dr. Chiang also was the Associate Director of the OHSU Casey Eye Institute. His research involves telemedicine and artificial intelligence for diagnosis of retinopathy and other ophthalmic diseases, implementation and evaluation of electronic health record systems, and modeling of clinical workflow.
- Dr. Lindsey Criswell, a professor of rheumatology in the University of California San Francisco (UCSF) Department of Medicine, School of Medicine and professor of orofacial sciences in UCSF School of Dentistry, is expected to begin her new role as the Director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) in early 2021. Her research focuses on the genetics and epidemiology of human autoimmune disease, specifically rheumatoid arthritis and systemic lupus erythematosus. Dr. Criswell has contributed to the identification of more than 30 genes linked to those disorders.
- Dr. Rena D'Souza is expected to begin her role as the Director of the National Institute of Dental and Craniofacial Research in late 2020. She comes to NIH

from the University of Utah where she was the assistant vice president for academic affairs and education for health sciences. Dr. D'Souza's research focuses on developmental biology and genetics; matrix biology; biomaterials, tissue engineering and stem cell; and clinical research. Her group's discovery that a novel mutation in the PAX9 gene was responsible for a severe form of human tooth agenesis opened a new field of research to discover genes and mutations as well as therapies for common human inherited disorders of the craniofacial complex. Dr. D'Souza has also done extensive work to promote diversity in the dental profession.

- Council member Dr. Amelie Ramirez was recently appointed to a five-year term on the CDC Foundation Board of Directors. Dr. Ramirez is professor and chair of the Department of Population Health Sciences and director of the Institute for Health Promotion Research at the University of Texas Health Science Center, San Antonio.
- The NIH continues to update its website on the status of grants and policies maintained by the Office of Extramural Research. This includes information for applicants relating to COVID-19 research. This is a rapidly evolving situation.
- In April, the NIH received supplemental funding from Congress for the Rapid Acceleration of Diagnostics – Underserved Populations (RADx-UP) program. Dr. Francis Collins allocated \$500 million to be spent on RADx-UP over 4 years. The program is a collaborative effort. Dr. Pérez-Stable, Dr. Richard Hodes (NIA), and Dr. Tara Schwetz (NIH/OD) are co-leading this effort, and Drs. Monica Webb Hooper (NIMHD), Ming Lei (NIGMS) and over 60 NIH program staff are actively engaged to stand up the program. The program's goal is to understand factors associated with disparities in COVID-19 morbidity and mortality and lay the foundation to reduce those disparities among underserved and vulnerable populations disproportionately affected by the pandemic. Funding decisions are currently being finalized for the Coordination and Data Center (CDCC), which will be a U24 grant within NIMHD. The CDCC is a \$20 million a year (total cost) grant that will provide administrative coordination and support for data collection and integration, community engagement, and technology for all RADx-UP awards, as well as develop a pilot program.
- NIMHD is co-leading the Community Engagement Alliance (CEAL) Against COVID-19 Disparities with NHLBI. This effort is grounded in principles of community engaged research and the observation that communities of color have been subjected to a high degree of misinformation. The goal of CEAL is to build an understanding of trust in science, accelerate the uptake of beneficial treatments and approaches to the pandemic, conduct urgent community-engaged research and outreach focused on COVID-19 awareness and education, and promote and facilitate inclusion of underrepresented racial and

ethnic populations in clinical trials evaluating vaccines and therapeutics. Demographic proportions of representation in the U.S. population is a minimum goal. The initial target of the program is 11 states and will include research study sites, FQHCs, federal partners, and national and community-based organizations. Dr. Gary Gibbons (NHLBI) and Dr. Pérez-Stable are co-chairing the effort. The staff has provided extraordinary efforts with the program, and special appreciation within NIMHD to Drs. Monica Webb Hooper, Nathan Stinson, Courtney Aclin, and Ms. Kelli Carrington.

NIMHD Updates

- NIMHD had several new hires since the last meeting, including: Corinne Baker, Digital Content Manager in the Office of Communications and Public Liaison; Dr. Luca Calzoni, a physician and biostatistician in the Office of the Director; Renita Saltibus, Operations Coordinator in the Office of the Director; Matthew Houle, Ethics Specialist in the Office of the Director; and Dr. Fabienne Santel, a physician in the Division of Scientific Programs.
- Kenneth Sonnenberg transitioned into his new role as Budget Officer in the Office of Administrative Management, and Dr. Deborah Duran has transitioned from her prior position to be the Senior Advisor on Data Science, Analytics and Systems in the Office of the Director.
- In NIMHD's Division of Intramural Research, Dr. Leonardo Mariño-Ramirez and Dr. Allana Forde were hired as Stadtman Tenure Track Investigators. Dr. Mariño-Ramirez, formerly at NLM as a staff scientist, will bring expertise in bioinformatics and genetics. Dr. Harold (Woody) Neighbors also joined the Division as a senior advisor. He is a long-time researcher in social epidemiology and community engagement.
- Congratulations to Dr. Kelvin Choi who was appointed a senior investigator, making him the first NIMHD investigator to become tenured. He started as a Stadtman Tenure Track Investigator and has advanced to senior investigator. Dr. Choi's research is on disparities in tobacco use and tobacco product use patterns by socioeconomic status among racial/ethnic minority populations.
- Dr. Julia Chen-Sankey, a postdoctoral fellow, received a K99/R00 Pathway to Independence Award in Tobacco Regulatory Research for her work titled, "Understanding the Influence of E-cigarette Advertisement Features." The award provides 24 months of postdoctoral training, mentorship, and guidance on transitioning to a tenure-track position with funding working with Dr. Choi. Dr. Chen was also recognized as a Matilda White Early Stage Investigator Paper Awardee. This is a national award to recognize emerging scientists with a competition for peer-reviewed articles by Early Stage Investigators. She presented her award-winning paper "E-cigarette Marketing and Experimentation

Among Youth and Young Adults” at the NIH Matilda White Riley Honor Event on June 8th, 2020.

- The 2020 Health Disparities Research Institute (HDRI) was held virtually from August 3rd-8th, 2020. HDRI sessions focused on developing knowledge and skills to assist early-stage investigators in pursuing independent researcher careers. A cohort of 66 cohort members were selected out of 232 applications. About 60% of the scholars were underrepresented scientists, 76% were women, and most were early career scientists, either postdoctoral fellows or assistant professors or another scientific position. They represented 24 different states, the District of Columbia, and Puerto Rico.
- Ten NIMHD Intramural Research Trainees participated in the 2020 Virtual Postbac Poster Day. The feedback to the participants went well.

Legislative Updates and Virtual Presentations and Activities

- In May, Dr. Pérez-Stable briefed Senators Lisa Murkowski and Bill Cassidy on RADx-UP along with Drs. Richard Hodes, Francis Collins and other NIH Leadership.
- In July, Dr. Pérez-Stable participated in a telebriefing for the pending COVID-19 vaccine trials with members and staffers from the Congressional Asian Pacific American Caucus, the Congressional Black Caucus, the Congressional Hispanic Caucus, and the Native American Caucus with NIH leadership and Dr. Gary Gibbons.
- In August, Dr. Pérez-Stable gave a presentation at the Friends of NIMHD virtual meeting and shared NIMHD priorities as well as the initiatives developed due to the COVID-19 pandemic.
- Since the last Council meeting, Dr. Pérez-Stable gave several virtual presentations including: the Advisory Committee to the Director: Rapid Acceleration of Diagnostics – Underserved Populations (RADx-UP) (06.11.2020); AAMC Grand Rounds Professional Development Conference (07.09.2020); Chronic Disease Day, Good Day (07.09.2020); Society of General Internal Medicine (SGIM), Plenary 1: Civil Rights and Health Disparities (OnDemand); Research America – Research!America Alliance Member Call (07.27.2020); Jackson Heart Study Students - NIH 2020 summer visit: Tougaloo College students Jackson Heart Study Scholars (07.28.2020): Keynote address (08.03.2020) Health Disparities Research Institute Virtual Meeting; and Practice Based Research Network Virtual Conference- NIH Panel (08.13.2020).
- Dr. Pérez-Stable also engaged in several other virtual activities including blog posts on Spotlight on COVID-19 and Health Disparities (05.26.2020) and Racism and the Health of Every American (06.12.2020).

- Dr. Pérez-Stable gave interviews with several different media outlets, including New Americans Media: Saving Minorities: Preparing for a second wave of COVID-19 (05.27.20); Facebook Live: Good Days Briefing, Chronic Disease Day (07.10.2020); ABC News: As vaccines move into phase 3 trials, diversity must be at top of agenda (08.02.2020); and The Uncomfortable Conversation Series with Reverend Rebekah Simon-Peter (08.05.2020). The Uncomfortable Conversation series was with a group of faith-based leaders (mostly pastors) who shared different perspectives about race.
- NIMHD hosted a blog series for National Minority Mental Health Awareness Month in July to discuss the impact of mental health on racial/ethnic minority populations. Brother You're on My Mind (BYOMM), a partner through Omega Psi Phi Fraternity (OPPF) was featured in a virtual chat. Delta Sigma Theta Sorority, Inc co-hosted the fireside chat which focused on how Black men and women can best support one another with mental and emotional wellbeing.
- NIMHD was fortunate to have had a successful symposium on March 3rd before COVID truncated most of the 10th anniversary plans. Dr. Gina Roussos is leading the Envisioning Health Equity Art Challenge. This is a national competition for artwork that reflects NIMHD's vision: An America in which all populations will have an equal opportunity to live long, healthy and productive lives. The competition will open in October with separate categories for youth (16-18 years) and adults (19+ years). Submissions will be judged on several criteria including quality, originality, creativity, and representation of the theme. Winners will be announced in March 2021 and will receive cash prizes totaling \$15,000 (1st, 2nd, and 3rd prizes).
- NIMHD, NIBIB and VentureWell co-sponsored the Design by Biomedical Undergraduate Teams (DEBUT) Challenge. The focus of the challenge was the development of accessible healthcare technologies for underrepresented populations and/or low resource settings in the U.S. A prize of \$15,000 was awarded to undergraduate students at Rice University for the Universal Brachytherapy Applicator "At Your Cervix." This is a low-cost 3D printed device that may facilitate and expand treatment of late-stage cervical cancer in areas where clinicians do not have the training or expertise to administer brachytherapy (radioactive implants).
- NIMHD awarded three supplements to Research Centers in Minority Institutions (RCMI) to support rural health disparities multi-sectoral research resource hubs. Recipients were: San Diego State University (US/Mexico Border), Tuskegee University (Alabama Black Belt), and Morehouse School of Medicine (southwest Georgia). The collaborations are around issues related to public health in rural areas leveraging local government, law enforcement, transportation, agriculture,

faith-based community, community philanthropic and academic sectors. If successful, the hubs can serve as a pilot for a larger initiative.

- Building on an NIMHD-NIEHS partnership started in 2015, NIMHD awarded three competing P50 awards in July 2020 totaling \$4.3 million. The University of Southern California and the University of New Mexico were renewal applications Baylor College was a new application.
- Staff initiated and led four virtual sessions with 45 NIMHD-funded researchers sharing their experiences with COVID-19. They discussed the impact on communities where research is conducted, strategies to modify recruitment, data collection, or intervention, and ways of understanding and addressing the impact of the pandemic on study outcomes. Dr. Pérez-Stable commented that NIMHD encouraged researchers to standardize the measures that they use to collect COVID-19 data to avoid measuring things 20 different ways, and not being able to compare cross groups. Dr. Bill Riley (OBSSR/NIH and NACMHD member) has been leading efforts on creating some common data elements around COVID. There is also a repository at the National Library of Medicine. He noted that the pandemic is chronic and what was true in May would not be true in September. Dr. Pérez-Stable reiterated the importance of everyone taking safety precautions such as: staying away from large groups, wearing masks, washing your hands, and maintaining a prudent physical distance.

Science Advances

- The Neighborhoods' Economics Predict Obesity in Elderly project used an Area Deprivation Index to examine neighborhood disadvantage and obesity in 5,066 Medicare beneficiaries in Missouri. They found that obesity was significantly more prevalent in more disadvantaged neighborhoods and that BMI data was more likely to be missing for patients in disadvantaged neighborhoods. The missing BMI data may indicate potential gaps in clinical care that warrant further study, or perhaps better linkages to electronic health records, where more precise information on body weight would be expected. These findings support the need for area-based allocation of preventive resources for disadvantaged older adults.
- Previous analysis of another NIMHD funded study, Moving to Opportunity (MTO) Program on Youth Mental Health, housing voucher experiment showed that moving from impoverished to more advantaged neighborhoods improved mental health outcomes for girls but worsened mental health for boys. Current analyses examined participant and externally collected neighborhood level variables for intervention participants. For girls, improvements in neighborhood disorder and drug activity partially explained the MTO's beneficial effects on girl's distress. For boys, improvements in neighborhood disorder, violence, and informal social

control (involvement of neighbors in maintaining safety and order) helped to mitigate the negative impact of the transition on behavioral problems, but not distress. The age of the move is relevant in that a pre-adolescent move tends to be generally more beneficial.

- A study on mental health service use and drop-out rates used data from the Collaborative Psychiatric Epidemiology Studies to examine whether barriers to treatment and reasons for dropout differed by race/ethnicity. One thousand four hundred and seventeen individuals from collaborative psychiatric epidemiology studies were studied. Results showed that the perception of treatment need significantly differed by race/ethnicity; Asians and Latinos more often reported no or low perceived need compared to Whites and Blacks. Among those who did not perceive a need for treatment, attitudinal barriers were more common than structural barriers.
- A study by Dr. Kaholokula (NACMHD member) and his team found that four states (California, Hawaii, Oregon, Utah, and King County, Washington) with large numbers of Native Hawaiian and Pacific Islander (NHPI) residents reported higher rates of COVID-19 cases among NHPIs than in other racial and ethnic groups. The rates of COVID-19 cases among NHPI in these states were greater than those reported for African Americans and American Indians. This is an under-studied population, often lumped in with Asians, where health profiles are frequently different. One of NIMHD campaigns is to ensure that researchers consider Native Hawaiian and Pacific Islander separately from Asians.
- A study from the NIMHD epigenetic portfolio on predictors of all-cause mortality associated with neighborhood disadvantage used DNA methylation profiling of Detroit Neighborhood Health Study participants. Results revealed associations of a recently developed epigenetic mortality risk score with objective measures of neighborhood disadvantage. The strongest association was seen with abandoned cars, poorly maintained streets, and non-art graffiti. Associations were independent of an individual's perception of their neighborhood and attenuated by greenspace features such as large trees and community gardens. There is limited empirical evidence on the benefit of green space on health, although it is often promoted. When stratified by sex, the associations appeared to be driven by women in the sample. Further research is needed to validate these findings in cohorts and determine how neighborhoods characteristics may affect gene expression and physiology in a sex-specific manner to influence risk and resilience.
- A paper in *JAMA Cardiology* used a computer simulation of coronary artery disease (CAD) Policy model to assess excess burden of premature CAD from socioeconomic status (SES) after risk factors in ages 35-64 years. The study looks at the contribution of less privileged socioeconomic status to premature

coronary artery disease. The model shows how much social class influences the preventable event of heart attacks at a premature age. Using data from NHANES and other sources, the arbitrary cutoff age of 65 was used. Low SES was defined as less than 150 percent of poverty. For a household of four this would be an income of less than \$40,000 a year or less than a high school education. Low SES men had almost double the rate of myocardial Infarcts (MIs). A similar finding was reported for women. Forty percent of this difference could be explained by traditional risk factors such as cholesterol levels, poorly controlled blood pressure, diabetes, sedentary behaviors, high BMI, and cigarette smoking. Other factors associated with having less privileged socioeconomic status explained the other 60% variance. The study found that in approximately 25% of U.S. adults aged 35-64, low SES was associated with early CHD. Social and structural factors to improve socioeconomic status must be addressed to improve poor clinical outcomes such as this.

- A grant funded by NIMHD examined the impact of COVID-19 stay-at-home orders on weight-related behaviors in 123 patients from an obesity clinic and a bariatric surgery practice in Texas. The patients completed an online survey. About 1.7% tested positive, and 14.6% reported symptoms. About 72.8% reported increased anxiety and 83.6% increased depression since the start of stay-at-home orders. Difficulty in achieving weight loss goals was reported by 69.6%, 47.9% reported less exercise time, 55.8% reported less exercise intensity, and 61.2% reported stress eating. Hispanics were less likely to report anxiety than Whites. Many of the supplements related to the COVID-19 crisis awarded from NIMHD and across the NIH will focus on mental health and substance use.
- A study published in Morbidity and Mortality Weekly Report (MMWR) looked at disparities by race/ethnicity from COVID-19 in 79 hot spot counties in 22 states for most of June. June was the beginning of the big surge in the summer that occurred in the Sun Belt states, Southern California, and Arizona. The ratio of cases to the population was over 8 for Asians and over four for Hispanics/Latinos and American Indians/Alaska Natives. The ratio was not as high for Blacks/African Americans and Native Hawaiians/Pacific Islanders (over 2.). The mean estimate of difference was higher than would be expected based purely on demographics in the counties.
- A study of obesity and mortality from Kaiser in Southern California, looked at 6,916 patients with COVID-19 and 206 deaths. Using multivariate models of race/ethnicity, they found that the relative risk of death for Latinos and African Americans was not significantly different from Whites. There was a strong association (sample size limited by number of deaths) related to severe obesity as represented by a BMI over 40.

- Dr. Larissa Aviles-Santa and collaborators published a study that aimed to describe and analyze the landscape of Research Program Grants (RPGs) funded by NIH from 2008 to 2015 involving Hispanic/Latino health. They focused on research in six health condition areas: asthma, cancer, dementia, diabetes, obesity, and liver disease. Of the 625 funded RPGs reviewed, 73% focused on cancer and obesity. The most predominant types of research included: mechanisms of disease (72.6%), behavioral studies (42.1%) and epidemiology (38.7%). These findings suggested that there is room and opportunity to expand research in understudied mechanisms of disease that could explain differences in prevalence of conditions among different heritage groups.
- Dr. Kelvin Choi's lab found that exposure to secondhand smoke exposure was associated with decreased academic performance among U.S. youth. The association of school performance and experimenting with tobacco or consequences of tobacco has been reported. It is unclear where it is in the causal pathway.
- Dr. Anna Nápoles conducted a randomized trial of a stress management intervention among rural Latina breast cancer survivors. Adapting these interventions and working closely with community-based organizations showed a significant impact on relaxation and coping confidence. These are challenging populations, in terms of reach. This work validates the role that ethnic minorities are willing to join clinical trials.
- Another work from the NIMHD Intramural lab looked at racial differences in association between luminal master regulator gene expression levels and breast cancer survival. This was a retrospective cohort study led by Dr. Jung Byun in East North Carolina which compared African American women with European American women with breast cancer and examined different mutations and biomarkers. It showed how differences in downstream transcription regulatory activity were governed by the biomarkers that are predictive of race and 3-year survival.
- Dr. Woody Neighbors made a few closing remarks regarding Dr. James Jackson. He stated that Dr. Jackson was not only a giant in the field of social psychology, minority health, but health in general. His work on the National Survey of Black Americans in the 70s, was paradigm shifting and revolutionary. He was profoundly optimistic and the best mentor that anyone could have.

PRESENTATIONS

Statement of Understanding, Priscilla Grant, JD, Chief Grants Management Officer, Grants Management Branch, OERA, NIMHD

Ms. Grant outlined the statement of understanding between NIMHD and the Council. The Council is responsible for advising, consulting with, and making recommendations to the Director of NIMHD on matters relating to NIMHD's research activities and functions. Council members serve as a national resource in setting the Institute's policies and research priorities, and special working groups can be formed at the request of the Council to examine critical issues of importance to the Institute. NIMHD is responsible for informing the Council of current scientific, budgetary, or legislative issues that could impact NIMHD and its constituents. Ms. Grant summarized the contents of open sessions, including discussion of scientific and policy issues and concept clearances, and closed sessions, including secondary review of grant applications. She also discussed review and resolution of appeals, administrative decisions and actions that do not require Council recommendation, and options available to the Council when reviewing grant applications and concept clearances.

Addressing Health Disparities Using Multiple Approaches – A Line of Research and Next Steps: Monica Webb Hooper, PhD, Deputy Director, NIMHD

Dr. Webb Hooper presented three randomized controlled trials from her tobacco-related research and her reflections on her time at NIMHD. One of her goals was to advance the science to develop, test and disseminate interventions to address modifiable behaviors that affect health and have the potential to reduce or eliminate health disparities. Across epidemiological surveys and clinical trials, a consistent finding is that African American males and females are less likely to achieve smoking cessation than White males and females. This difficulty in quitting smoking among African Americans is due to multi-level factors rather than individual failures. Dr. Webb Hooper's lab found that distress levels are often greater among African Americans who smoke but wish to quit, and access to evidence-based interventions is limited; when treatment is available, it is not always responsive to community needs. While smoking prevalence among Hispanics/Latinos is lower than the national average, it varies by nationality, and smoking-related illnesses are among the leading causes of death in the Hispanic/Latino population.

For several years, Dr. Webb-Hooper led a tobacco cessation research clinic, which treated adults using cognitive behavioral therapy (CBT). A longitudinal, observational analysis with data from this clinic focused on racial/ethnic differences in distress processes among individuals who completed eight CBT sessions in four weeks and eight weeks of nicotine patch therapy. At baseline, African Americans reported elevated perceived stress compared to Whites. Over the course of the CBT sessions, perceived stress was significantly reduced among African Americans and Latinos, which resulted in similar levels across groups at the end of therapy. The low to moderate perceived stress levels of Whites did not change from baseline to the end of therapy. The data showed no difference in abstinence throughout the 12-month follow-up period, and

African Americans were more likely to quit than Whites. Greater abstinence in African Americans was partly explained by the reduction in perceived stress and depressive symptoms.

Dr. Webb Hooper and her team followed up on these results by conducting a dual site randomized controlled trial called Quitville, which was designed to replicate the causal role of CBT in the previous study. Initial findings found that intensive CBT combined with pharmacotherapy produced strong cessation rates and the 12-month abstinence rate remained high. A longitudinal analysis of data from the follow-up period showed a significant positive effect of CBT compared to general health education, and biochemically verified abstinence rates were significantly greater in the CBT condition compared to the general education condition. Rates of abstinence over time were comparable across racial/ethnic groups, and race by condition interactions were not significant.

In a recent paper published from the Quitville sample, the team examined racial and ethnic differences in discrimination experiences over the past 12 months and the role of perceived discrimination in smoking abstinence. All three groups: Latinos, African Americans, and Whites, reported perceived racial discrimination. At post-intervention there was an inverse association between perceived discrimination and smoking status, and the same inverse association existed at the six-month follow-up point.

In the interest of ensuring that evidence-based interventions reach as many people as possible and understanding differences in the interest and use of digital interventions across U.S. populations, the team analyzed data from five state quit lines that offered counseling and a web-only intervention option. Asian Americans, Latinos, and Whites were significantly more likely to sign up online and enroll in the web-only program, while African Americans were least likely to enter via the internet. Among those who enrolled in the web-only program, engagement was significantly lower among African Americans. Building off of these findings, the Project FREE randomized controlled trial tested the effectiveness of a culturally specific intervention as a component of quit line care. Their video-based tobacco cessation intervention, Pathways to Freedom, was translated from a group CBT intervention and a widely distributed written smoking cessation guide. Participants were self-identified African Americans who were enrolled in the North Carolina state quit line. The Pathways to Freedom intervention led to a 76% increase in website engagement and significantly greater abstinence at the six-month time point relative to the standard smoking cessation video.

Dr. Webb Hooper and her team recently completed a two-armed pilot of a mobile health program called Path2Quit, which translated the Pathways to Freedom intervention into a mobile health format. They recruited a low-income sample and randomized participants to receive either Path2Quit or the National Cancer Institute (NCI's) SmokefreeTXT

program. Both interventions were rated highly in terms of quality, content, and acceptability, with moderate to strong use. The Path2Quit intervention generated more days of nicotine replacement therapy use and lower urges to smoke at follow-up compared to SmokefreeTXT. The Path2Quit participants were 3.6 times more like to have carbon monoxide-verified abstinence than SmokefreeTXT participants.

From these studies, Dr. Webb Hooper and her team concluded that more time and effort needs to be spent in focusing on interventions that can reduce and eliminate health disparities, and documenting those disparities is only the first step. Group interventions, particularly CBT for smoking cessation, show significant potential. Many participants emphasized the importance of culturally specific interventions, and the methods used for tobacco cessation could be applied to other health behaviors. Effective, intensive face-to-face interventions could also be translated into population-based approaches. Dr. Webb Hooper noted that the combination of COVID-19 and longstanding systemic racism have made health disparities part of the national conversation, and NIMHD is currently more visible than ever from a scientific perspective.

Moving Along The Spectrum Of Translational Research To Address HIV Disparities Among Adolescent Men Who Have Sex With Men: Brian Mustanski, PhD, Director, Institute for Sexual and Gender Minority Health and Wellbeing, Co-Director, Third Coast Center for AIDS Research (CFAR), Co-Director, Center for Prevention Implementation Methodology, and Professor, Department of Medical Sciences, Feinberg School of Medicine, Northwestern University, NACMHD Member

Dr. Mustanski presented his research on HIV disparities among adolescent men who have sex with men (MSM). According to the Center for Disease Control, MSM represent the largest proportion of HIV diagnoses in the United States. As of 2018, trends indicated a decline or stabilization in the overall number of HIV infections in the United States, but among MSM, particularly racial/ethnic minorities in the youngest age groups, diagnoses continue to increase. Community organizations and health departments are often constrained to using the CDC's compendium of evidence-based interventions for HIV prevention in order to receive funding, making it difficult to address the HIV epidemic among the most impacted groups.

In order to explore the ethical challenges of involving LGBT adolescents in research, Dr. Mustanski obtained an R01 grant from NIMHD for a four-year study, with the goal of generating knowledge to inform ethical practice in sexual health and HIV prevention research with sexual and gender minority adolescents. His team found that teens who were able and willing to obtain parental permission to be in a study looked very different than those who were not, leading to a biased perspective of the health issues in that

population. They also found that teens understood the risks and benefits of research participation at levels comparable to young adults over the age of 18, and that parents could understand and appreciate the need for waivers of parental permission.

In RADAR, a large cohort study funded by the National Institute on Drug Abuse (NIDA), Dr. Mustanski and his team followed 1,200 young MSM and examined questions of HIV and substance use from a multi-level perspective. The RADAR cohort mirrored the demographics of Chicago, approximately one third Black, one third Latino, and one third White, and nearly 3% of the cohort became infected with HIV each year, with over 6% of young Black MSM becoming infected each year. Young Black MSM reported fewer sex partners and fewer condom-less anal sex partners than other racial groups in the cohort.

Markers of stigma and structural determinants differed by race, with Black MSM more likely to report variables like experiences of victimization and traumatic experiences. Young Black MSM were more likely to have a detectable viral load and disparity in treatment of different racial groups continued to drive new infections. Young Black MSM were more likely to engage in more frequent HIV testing, which often falls outside of the healthcare system. Researchers need to learn from the success of community HIV testing organizations and apply them to HIV care.

Dr. Mustanski and his team developed a software called NetCanvas to study sexual networks among young MSM. They found that Black sexual networks were denser than those of White and Latinx participants, and young Black MSM had the highest rate of homophily.

Along with developing HIV interventions using e-health approaches, Dr. Mustanski and his team have explored ways to accelerate the pathway of implementing effective interventions. SMART is a nationwide U01 focused on developing a suite of HIV prevention programs for teen MSM. It studies a package of interventions that are increasingly intensive, with some inexpensive interventions delivered to everyone and the more expensive and intensive interventions reserved for those who need them the most. The team culturally and linguistically adapted SMART, and they received two supplements from NIMHD for the project: one to conduct formative research on Native Hawaiian and Pacific Islander populations on how to reach them with e-health interventions, and one to study the delivery of Spanish language HIV prevention programs.

Data from the SMART study, published in *Pediatrics*, recently highlighted the importance of sex education and behavioral interventions to reach populations that are less likely to seek HIV testing, such as teen MSM.

Dr. Mustanski and his team are also studying ways to implement the Keep It Up program, which is an evidence-based intervention in the CDC compendium, and comparing a community-based strategy to a direct-to-consumer strategy. Dr. Mustanski also co-created the Implementation Science Coordination, Consultation, and Collaboration Initiative as part of the Ending the Epidemic initiative, a Department of Health and Human Services-wide effort to end the HIV epidemic in the U.S. within the next ten years.

CONCEPT CLEARANCES

Understanding and Addressing the Impact of Structural Racism and Discrimination on Minority Health and Health Disparities: Derrick Tabor, PhD, Program Official, Integrative Biological and Behavioral Sciences Research, NIMHD

The objective of this initiative is to promote the inclusion of structural racism and discrimination (SRD) in health research throughout NIH. It was influenced by the NIMHD framework, which promotes research at various levels including organizational and institutional, neighborhood and community, and societal. This framework should guide and inform projects. The initiative was organized into two domains: observational research and interventions. The expectation would be that collaborating Institutes would develop specific areas of interest, with some common, critical elements and perspectives across NIH.

All SRD projects should relate to race/ethnicity, address SRD in one or more NIH-designated health disparity populations in the U.S.; address documented disparities in health outcomes; and move beyond the individual level of data collection and intervention. One area of interest within NIMHD is the examination of the impact of structural racial/ethnic or SES-based discrimination in the criminal justice system. This could include observational studies on police stops, bail, and pre-trial detainment, sentencing, probation, and parole. Other areas of interest include identification of family, organizational, neighborhood, cultural, and community characteristics that moderate the relationship between exposure to SRD and health, and cumulative and chronic experiences of SRD and their impact on biological processes that contribute to poor health outcomes. These biological processes include allostatic load, epigenome, microbiome, and neurological signatures.

Intervention studies of particular interest to NIMHD are those that promote health, treat conditions and diseases, or prevent SRD and related conditions. They should improve mental and physical health by fostering positive interactions and more inclusive social climates and address SRD in healthcare settings across multiple domains to improve outcomes, access, and quality. Other issues of interest to NIMHD are ways to work with

clinicians and staff, physical spaces, and service and delivery, as well as place-based interventions to address structural factors in multiple sectors based on community priorities and strategies.

Comments from Council: The document should underscore the contribution of multi- or mixed- method approaches of quantitative and qualitative techniques; the phrasing of the central concepts should be consistent throughout the document and not vary; and the importance of enhancing the analytic toolkit to effectively analyze and interpret the intersections that contribute to SRD should be addressed.

Dr. Hunter called for a motion to move the concept forward to Funding Opportunity Announcement (FOA) development. The motion was made and seconded. The Council passed the motion by majority vote.

Patient-Clinician Communication and Relationship: An Opportunity to Affect Health Outcomes in Health Disparity Populations: Benyam Hailu, MD, Division of Scientific Programs, Clinical and Health Services Research, NIMHD

This concept focused on the downstream impacts of patient-clinician communication and/or relationship (PCC/R) on objective health outcomes, with an emphasis on racial/ethnic minorities and health disparities. Research has shown that effective patient-clinician communication is associated with increased satisfaction, adherence to treatment, and quality of life. Recent work by Dr. Monica Peek and Dr. Marshall Chin recommended integrating healthcare with community projects, building partnerships, and understanding historical, political, and economic contexts.

The objectives of this initiative were to understand how PCC/R in primary care and chronic disease care settings affects health outcomes in health disparity (HD) populations and to identify the best interventions to improve patient-clinician communication, with the goal of improving health outcomes. There is a large body of research examining the evolution of PCC/R, but very few studies address HD populations. This concept aims to expand the evidence base for factors such as implicit bias, limited English proficiency, limited health literacy, trust/mistrust, empathy, and cultural competencies.

Research types anticipated for this concept include formative, retrospective-prospective analyses and interventions, with a focus on primary care and other chronic care settings. Studies should explore which interventions improve PCC/R, what the benefits are, and how they benefit HD populations. In addition to clinical health outcomes, studies could look at health effects such as intermediate outcomes, emergency care and hospitalizations and readmissions. They could also focus on lessons learned with regard to sustainability and cost effectiveness. Projects should complement the NIMHD research framework.

For topics related to telemedicine, studies should explore its effect on health outcomes, possibilities of providing long-term care for patients with multiple chronic diseases, effects on transcultural communication, methods of communication and care for low income and diverse populations, and best practices of patient-clinician telecommunication.

Comments from Council: The paper's equity lens was considered too vague and should be more clearly differentiated from the general importance of patient-centered care. Causal relationships and interrelations should be added to clarify how equity-specific issues relate to the interpersonal level. The outcomes should be broadened beyond clinical process measures and projects should be encouraged to integrate interpersonal PCC/R interventions with systemic interventions. The goal of the work should be to learn how to assess each person's expectation about the style of PCC/R that they find most beneficial and develop a type of assessment as part of the research concept. The concept should focus more on asynchronous and synchronous technologies used for telemedicine and their effect on health outcomes, especially in the context of COVID-19.

Dr. Hunter called for a motion to move the concept forward to FOA development. The motion was made and seconded. The Council passed the motion by majority vote.

School-Based Health Centers: A Promising Health Services Model for Advancing Health Equity: Beda Jean-Francois, PhD, Division of Scientific Programs, Clinical and Health Services Research, NIMHD

The goal of this initiative was to investigate the effectiveness of school-based health centers (SBHCs) as health services care models to address the needs of vulnerable youth, including sexual and gender minority youth. A large body of evidence suggests that child poverty is linked with negative outcomes such as health challenges, and minority youth are at greater risk of exposure to trauma and development of mental health disorders and are less likely to have access to mental health services. SBHCs have been recommended as a safety net healthcare delivery model for youth who are uninsured, underinsured, or do not have access to consistent healthcare.

Although evidence supports the feasibility of SBHCs to increase access to healthcare and improve health outcomes for vulnerable youth, there are several gaps that warrant further research. These include how SBHCs provide access to care; how effective they are in managing and/or preventing chronic illnesses; the combination of services that work best in SBHCs; utilization patterns; mechanisms by which SBHCs engage high risk vulnerable youth to improve health outcomes; and how SBHCs complement or reduce the use of other services. There is also a need for more large-scale multi-site studies of SBHCs.

This initiative calls for research that examines the effectiveness of SBHCs as health services delivery models to manage and prevent chronic illnesses that disproportionately burden vulnerable youth. Projects could consist of impact evaluations, implementation studies, observational studies, and cluster randomized trials to assess the impact of SBHCs and delineate which aspects are effective. Research collaborations across SBHC sites and with the Department of Education are encouraged. Potential topics include the contributing mechanisms that explain the link between SBHCs and improvements in health outcomes; the differential impact of SBHCs on high risk subgroups; the value that Federally Qualified Health Center sponsorship of SBHCs adds to systems of care for vulnerable youth; intergenerational health outcomes; effective implementation models for youth in rural areas; potential impacts of telehealth; and ways that SBHCs can respond to long-term health needs of vulnerable youth impacted by COVID-19.

Comments from Council: Understanding the multiple systems of care that were available or unavailable to youth in various settings would impact how youth interface with SBHCs and should be emphasized. It would also be important to examine the intersections across multiple vulnerable populations. Research should be encouraged that focus on SBHCs' abilities to address factors related to social determinants of health. Additionally, community engagement and involving key stakeholders to better understand their process to improve services and outcomes should be incorporated.

Dr. Hunter called for a motion to move the concept forward to FOA development. The motion was made and seconded. The Council passed the motion by majority vote.

PUBLIC COMMENTS

There were no public comments.

CLOSING REMARKS

With no further business to attend to, Dr. Pérez-Stable adjourned the meeting at 4:30 p.m.

END NOTE:

REVIEW OF GRANT APPLICATIONS in CLOSED SESSION

A portion of the meeting was closed to the public in accordance with the provisions set forth in Sections 552b(c)4 and 552b(c)6, Title 5 U.S.C. and 10(d) of the Federal Advisory Committee Act as amended (5 U.S.C. appendix 2).

Dr. Pérez-Stable called the Closed Session to order at 1:00 pm September 3, 2020.

Dr. Hunter led the second level review of grant applications submitted to NIMHD programs. Council Members and Staff were instructed on conflict of interest and confidentiality regulations. Members and Staff absented themselves from the meeting room and discussions for which there was a potential conflict of interest, real or apparent.

The Council considered 397 competing applications requesting an estimated \$538,843,351.00 in requested total costs for year 1. Funding recommendations for all applications submitted in response to funding opportunity announcements were reviewed. Applications submitted in response to program announcements and special program review announcements were considered by the Council through *En Bloc* voting.