

Identifying Compounding Disparities in Health, Education and Connectivity

Eliseo J. Pérez-Stable, M.D.

**Director, National Institute on Minority
Health and Health Disparities**

eliseo.perez-stable@nih.gov

**Government University-Industry
Research Roundtable
National Academies**

**Washington, DC
October 16, 2019**



NIH National Institute
on Minority Health
and Health Disparities

Minority Health Definition

- **Minority Health Research focuses on health determinants that lead to specific outcomes within a minority group and in comparison to others**
- **Race and ethnic minorities share a social disadvantage and/or are subject to discrimination as a common theme**



Office of Management and Budget Census Race/Ethnic Categories

- **African American or Black**
- **Asian**
- **American Indian or Alaska Native**
- **Native Hawaiian or other Pacific Islander**
- **White**
- **More than one race**
- **Latino or Hispanic**



National Institute
on Minority Health
and Health Disparities



Life Expectancy in the U.S., 2014

| | Men | Women |
|----------------------|-------------|-------------|
| Whites | 76.5 | 81.1 |
| Blacks | 72.0 | 78.1 |
| Latinos | 79.2 | 84.0 |
| Total in 2017 | 76.1 | 81.1 |

Arias E., [NCHS data brief](#), CDC, (2016), no 244
Murphy SL, et al., [NCHS data brief](#), CDC (2018), no 328



National Institute
on Minority Health
and Health Disparities

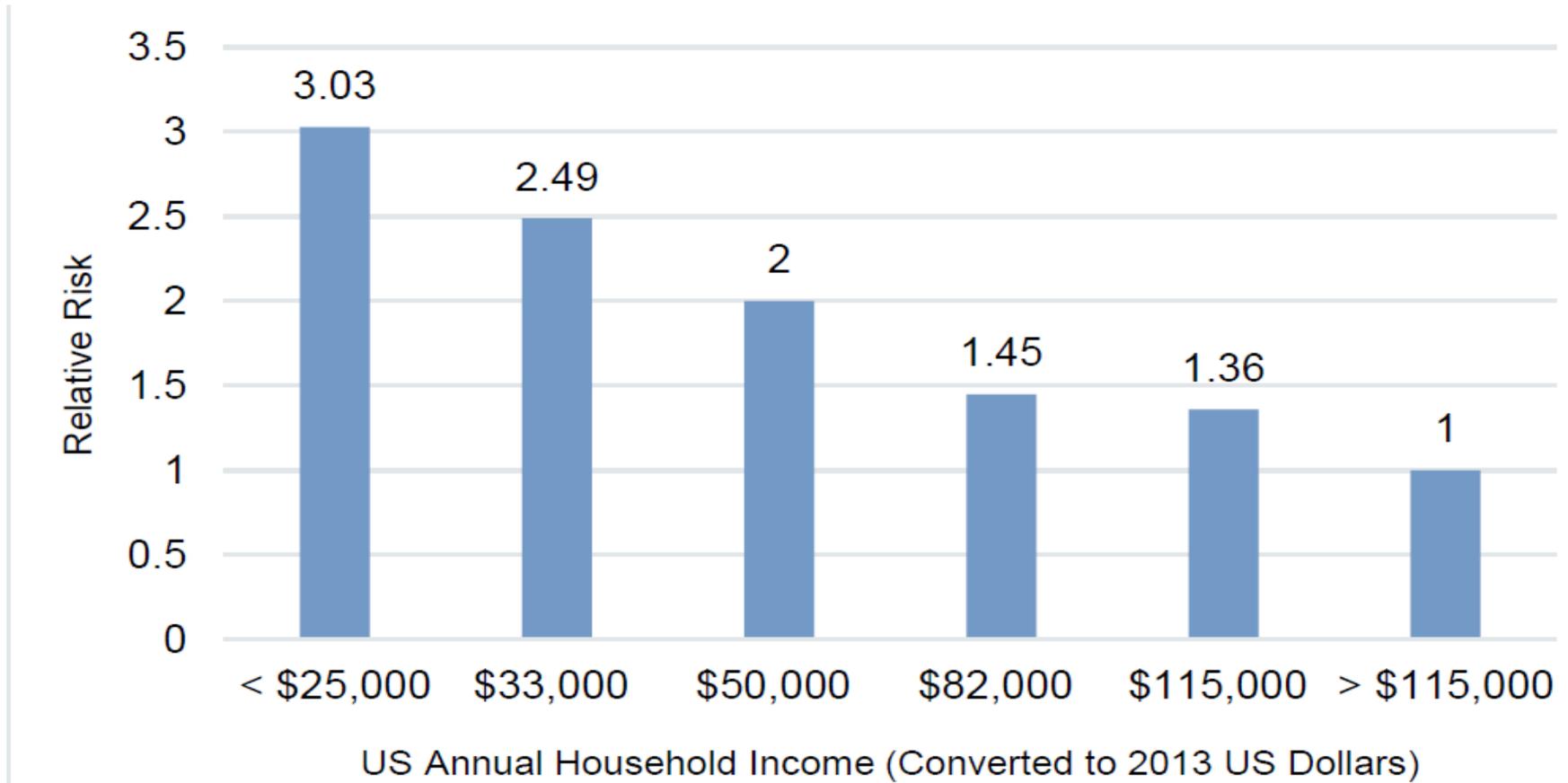


Health Disparity Populations

- **Racial/ethnic minorities defined by OMB**
- **Less privileged socio-economic status**
- **Underserved rural residents**
- **Sexual gender minorities**
- **A health outcome that is worse in these populations compared to a reference group defines a disparity**
- **Social disadvantage results in part from being subject to discrimination, and underserved in health care**



Relative Risk of All-Cause Mortality by US Annual Household Income Level in 2016



Wyatt R, et al., Achieving health equity: A guide for health care organizations. IHI White Paper. Institute for Healthcare Improvement, 2016



National Institute on Minority Health and Health Disparities Research Framework

| | | Levels of Influence* | | | |
|--|----------------------------|---|---|---|--|
| | | Individual | Interpersonal | Community | Societal |
| Domains of Influence <i>(Over the Lifecourse)</i> | Biological | Biological Vulnerability and Mechanisms | Caregiver–Child Interaction Family Microbiome | Community Illness Exposure Herd Immunity | Sanitation Immunization Pathogen Exposure |
| | Behavioral | Health Behaviors Coping Strategies | Family Functioning School/Work Functioning | Community Functioning | Policies and Laws |
| | Physical/Built Environment | Personal Environment | Household Environment School/Work Environment | Community Environment Community Resources | Societal Structure |
| | Sociocultural Environment | Sociodemographics Limited English Cultural Identity Response to Discrimination | Social Networks Family/Peer Norms Interpersonal Discrimination | Community Norms Local Structural Discrimination | Social Norms Societal Structural Discrimination |
| | Health Care System | Insurance Coverage Health Literacy Treatment Preferences | Patient–Clinician Relationship Medical Decision-Making | Availability of Services Safety Net Services | Quality of Care Health Care Policies |
| Health Outcomes | |  Individual Health |  Family/ Organizational Health |  Community Health |  Population Health |

National Institute on Minority Health and Health Disparities, 2018
 *Health Disparity Populations: Race/Ethnicity, Low SES, Rural, Sexual/Gender Minority
 Other Fundamental Characteristics: Sex/Gender, Disability, Geographic Region

Assessment of Socioeconomic Status or Social Class in Clinical Medicine

- **Education – in years or categories**
- **Income –annual household/dependents**
- **Occupation categories – Whitehall**
- **Life course SES — effects understudied**
- **Parental education (children)**
- **Type of insurance**
- **Impute from census using zip code**
- **Wealth or total assets**



Social Determinants of Health

- **Age, gender, race/ethnicity, SES, occupation**
- **National origin or family background**
- **Urban or rural residence or geographic region**
- **Cultural identity, Religion, religiosity**
- **Immigrant, generation, documentation**
- **Language proficiency, acculturation**
- **Health literacy and numeracy**
- **Food and housing insecurity**
- **Sexual orientation, gender identity**



Structural Social Determinants of Health

- **Access to affordable housing**
- **Green space and sidewalks**
- **Access to broadband internet and Wifi**
- **Transportation — public and individual**
- **Schools and educational institutions**
- **Employment and economic opportunity**
- **Public safety and criminal activity**
- **Access to healthy and affordable food**



NIMHD Research FOAs that Apply

- Immigrant Populations: etiology/interventions
- Disparities in Surgical Care and Outcomes
- Social Epigenomics
- Sleep Disparities
- Liver Cancer and Chronic Liver Disease
- Opioid Use Disorders
- Simulation Modeling and Systems Science
- Lung Cancer Etiology, Screening and Care
- Health Information Technologies



National Institute
on Minority Health
and Health Disparities





Workforce Diversity is an Urgent Issue

- Only 12% of medical school graduates were URM in 2017
- <10% of practicing physicians and 14% of entering class in 2017 were URM
- Evidence that training more diverse clinicians improves access to and quality of health care
- 50% of children in the US today are from race/ethnic minority groups



National Institute
on Minority Health
and Health Disparities



Black and Latino Physicians Provide More Care for Underserved

- MD practice locations in California 1990; survey of 718 PCPs in 1993 to evaluate their patients
- Black MDs cared for more Black patients (25%) and more with Medicaid coverage; Latino MDs saw more Latino patients (21%) and uninsured

Komaromy M, et al, New Engl J Med 1996, 334: 1305-10

- 7070 adults who identified a clinician as usual source of care in 2010 MEPS
- Minority MDs cared for 53% of minorities and 70% of LEP; more Medicaid pts and uninsured

Marrast LM, et al, JAMA Internal Med 2014, 174: 289-290



National Institute
on Minority Health
and Health Disparities



Graduating Medical Students Intent to Work with Underserved

- **AAMC graduate survey, 2010-12, N=40,836**
- **Predictors of intent to work in underserved communities by demographics, specialty plans, and debt burden**
- **Women OR = 1.59**
- **Primary Care = 1.65**
- **URMM = 2.79 (other minorities = 0.99)**
- **Adjusted for loan burden (63% URM had >200k)**

Garcia A, et al, Academic Medicine 2017, E-pub, Sept



National Institute
on Minority Health
and Health Disparities



Promoting Health Equity in Health Care to Reduce Disparities

- **Expand Access:** Health insurance, place and clinician as fundamental: ACA experiment
- **Public Health Consensus:** Rx hypertension
- **Coordination of Care:** Systems, navigators, and target conditions
- **Patient-Centered Care:** PCMH, effective communication, cultural competence, primary care saves lives
- **Performance measurement:** Risk of penalty
- **Need Equity Quality Measure for systems**



Community Engaged Research to Reduce Health Disparities: What is Needed?

- **Shift models of care to population health with standardized social determinants of health**
- **Enhance access to health care services: portal for patients, e-referrals, tele-medicine, proxies, visuals**
- **Minorities as likely to use the patient portal once engaged in care (HINTS)**
- **Engage community resources in promoting health: nutrition, physical space, tobacco**
- **Recognize and manage discrimination**



Precision Medicine and Clinical Care

- **When is “more precise” individualized approach better than a standard one with demonstrated efficacy?**
- **One size fits all approach can work to improve outcomes in many clinical situations**
- **New is not always better and is usually more expensive -- cost has to be considered**
- **Precision in patient-clinician interactions**



Recommendations for Discussion

- **Population health should be central focus of health system**
- **Data on predictors, risks and outcomes of the defined population to include social factors**
- **Leverage technology to maximize access and quality**
- **Enhance cultural competence/humility and reduce structural discrimination**



Special Issue of *AJPH*: *New Perspectives to Advance Minority Health and Health Disparities Research*

Supplement 1, 2019, Vol 109, No S1

- Editor's choice by NIMHD Director Dr. Eliseo J. Pérez-Stable and NIH Director Dr. Francis S. Collins
- Definitions for minority health, health disparities, and NIMHD Research Framework
- 30 research strategies in methods, measurement, etiology, and interventions
- Multi-year process with more than 100 authors, including NIH program officers and academic scientists



National Institute
on Minority Health
and Health Disparities



Connect With Us



Visit us online www.nimhd.nih.gov



Connect with us on Facebook
www.facebook.com/NIMHD



Follow us on Twitter
[@NIMHD](https://twitter.com/NIMHD)



Join us on [linkedin.com/company/nimhd-nih/](https://www.linkedin.com/company/nimhd-nih/)



Sign up for news
<https://public.govdelivery.com/accounts/US-NIH/NIMHD/subscriber/new>



National Institute
on Minority Health
and Health Disparities

