Drivers of mental health disparities among older Americans during the COVID pandemic

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Presented October 25th, 2021

16th Annual University of Maine Clinical Geriatrics Colloquium:

Advancing Anti-Racism, Diversity, Equity & Inclusion in the Delivery of Age Friendly Health Care

Health and healthcare disparities

- "Differences which <u>systematically</u> and <u>negatively</u> impact <u>less advantaged</u> groups"(1,2)

- "Differences which <u>society has a role in creating</u>, and therefore has the greatest potential to ameliorate" (1)

- "Differences in the quality of health care that are <u>not due to needs, preferences</u> or <u>appropriateness</u> of intervention"(3)

1.*Dehlendorf, Christine et al*. "Health disparities: definitions and measurements." *American journal of obstetrics and gynecology* vol. 202,3 (2010): 212-3. doi:10.1016/j.ajog.2009.12.003
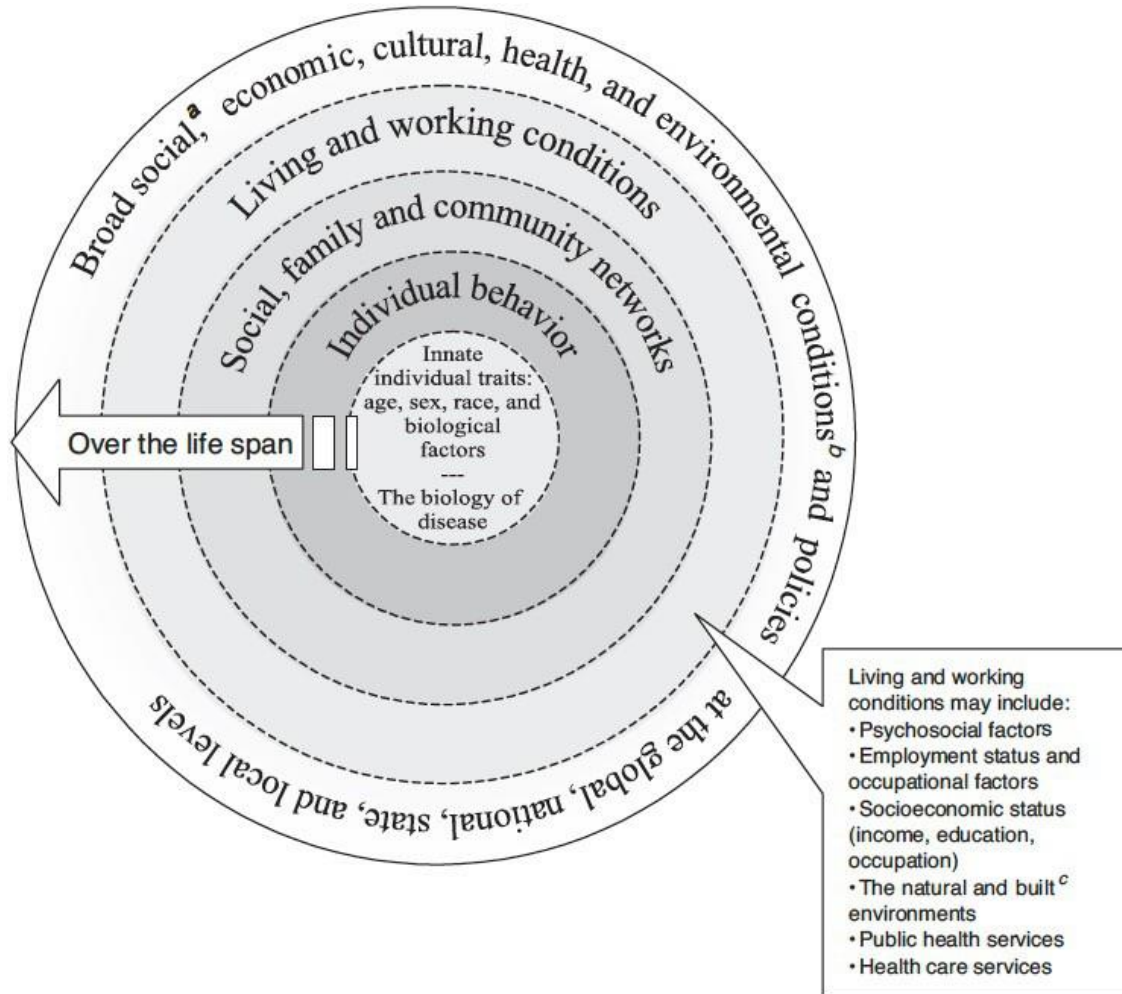
2. *Braveman P.* Health disparities and health equity: concepts and measurement. Annu Rev Public Health. 2006;27:167–94;

3. **Smedley B, Stith A, Nelson A**. Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare. Washington, D.C: The National Academies Press; 2003
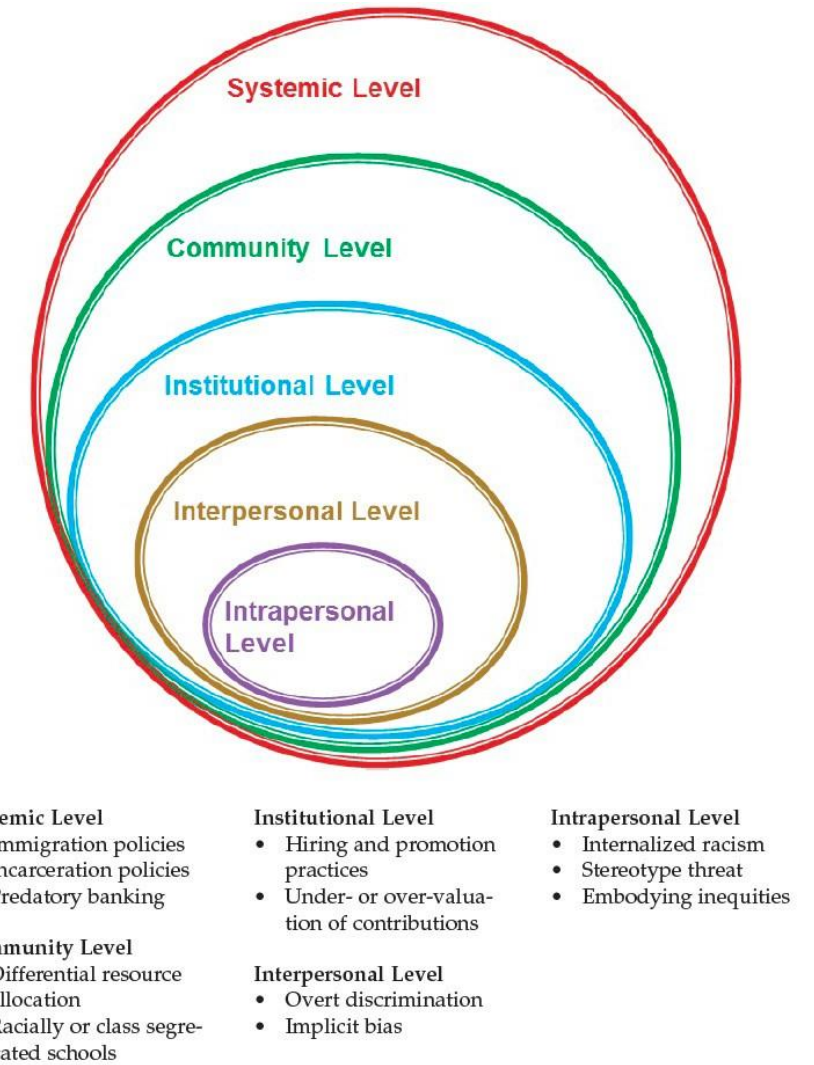
4. Also see **Fiscella, K., & Sanders, M. R.** (2016). Racial and ethnic disparities in the quality of health care. *Annual review of public health*, *37*, 375-394. and *Wasserman, J., Palmer, R. C., Gomez, M. M., Berzon, R., Ibrahim, S.A., & Ayanian, J.Z* (2019). Advancing health services research to eliminate health care disparities. *American journal of public health*, *109*(S1), S64-S69.

# Models for understanding disparities in health and care

IOM Model

Broad social,[a] economic, cultural, health, and environmental conditions[b] and policies at the global, national, state, and local levels

Living and working conditions

Social, family and community networks

Individual behavior

Over the life span

Innate individual traits: age, sex, race, and biological factors
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The biology of disease

Living and working conditions may include:
- Psychosocial factors
- Employment status and occupational factors
- Socioeconomic status (income, education, occupation)
- The natural and built[c] environments
- Public health services
- Health care services

Social Ecological Model

Systemic Level

Community Level

Institutional Level

Interpersonal Level

Intrapersonal Level

Systemic Level
- Immigration policies
- Incarceration policies
- Predatory banking

Community Level
- Differential resource allocation
- Racially or class segregated schools

Institutional Level
- Hiring and promotion practices
- Under- or over-valuation of contributions

Interpersonal Level
- Overt discrimination
- Implicit bias

Intrapersonal Level
- Internalized racism
- Stereotype threat
- Embodying inequities

Implications to the COVID Era: Hospitalizations

Age-adjusted COVID-19-associated hospitalization rates by race and ethnicity — COVID-NET, March 1–December 5, 2020
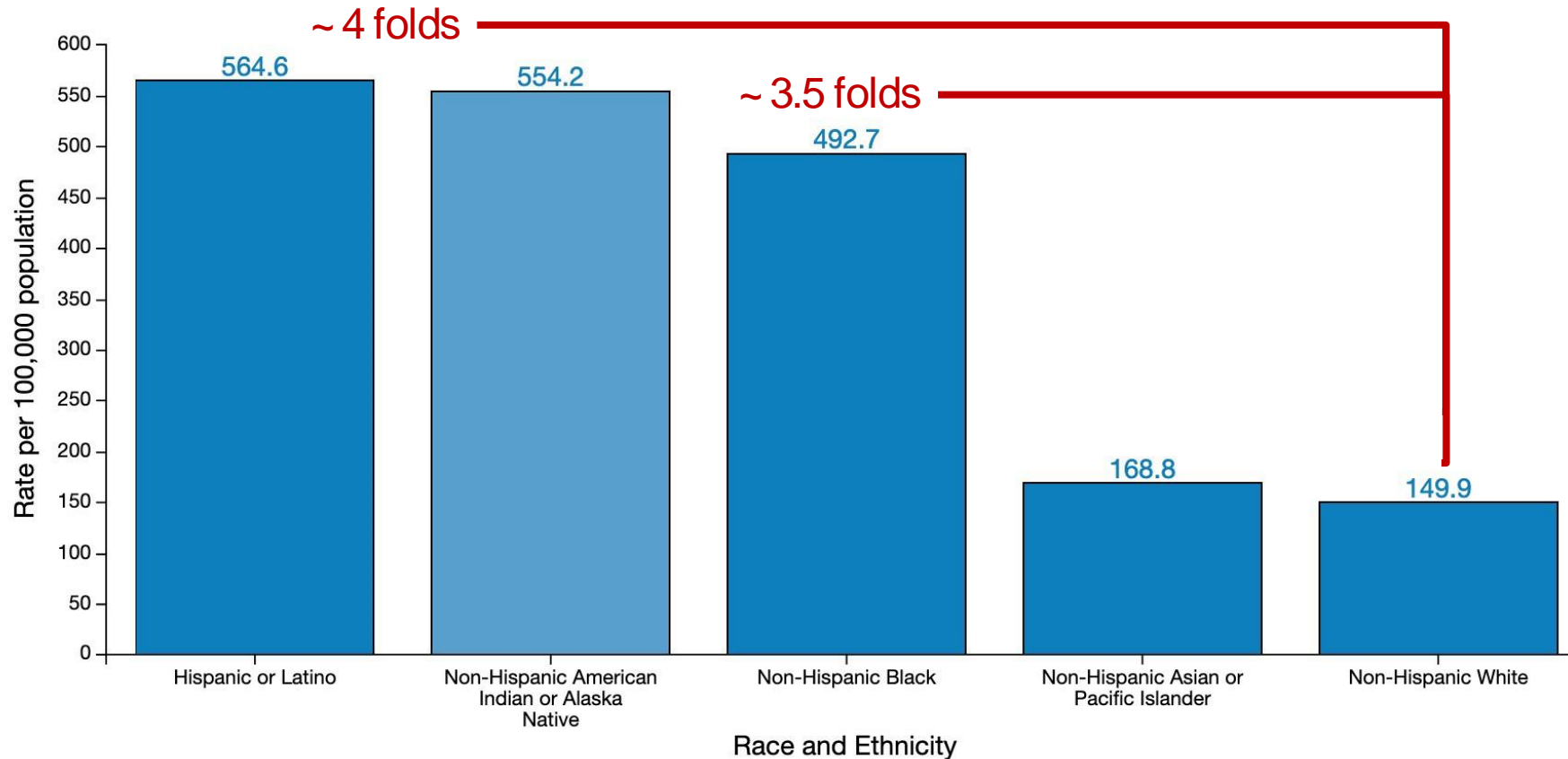
Framework and Hypotheses

Framework: Influence of <u>life course experiences</u>, the <u>effects of natural disasters</u>, and <u>chronic stress exposure</u> on the **psychological health** and **well-being** of diverse older race/ethnic older adults.

H1: Over time, given the known impacts of chronic stress and disasters, there will be a significant increase in older adults' reports of anxiety and depression (a), and worsening of general health (b). Rates of mental and general health problems will vary nationwide (c).

H2: The increase in reports of anxiety and depression and worse health among older race/ethnic adults will be inversely related to age (a) and seen largely among those with significant financial strain and/or low income or in lower-wage occupational fields (b).

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social Integration	Health Coverage
Income	Transportation	Language	Access to Healthy Options	Support Systems	Provider Availability
Expenses	Safety	Early Childhood Education		Community Engagement	Provide Linguistic and Cultural Competency
Debt	Parks	Vocational Training		Discrimination	
Medical Bills	Playgrounds				
Support	Walkability	Higher Education		Stress	Quality of Care
	Zip Code/ Geography				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

KFF
HENRY J KAISER FAMILY FOUNDATION

Design & Methods

Research Design

- Primary analysis of the Census Bureau's Household Pulse Survey (HPS)
- Unweighted sample size:
  - 154,064 self-reporting Black (n=60,458 Asian (n=32,939), and Hispanic (n=60,667)
- Complementary analysis of:
  - UW IWRI **CO**VID-19 Communities of Color Needs Assessment (n=644)

HPS Sample : Individuals ages 50-years and older, reporting race/ethnic background as Non-Hispanic Black (NHB), Non- Hispanic Asian (NHW), and Hispanic; **Data collected April 2020 to February 2021**

IWRI Sample: Individuals ages 50-years and older reporting Native American/American Indian, Alaska Native, First Nations, Inuit or Métis, Native Hawaiian/Kanaka Maoli , Pacific Islander, Indigenous People/Tribe from Mexico, Central or South America , and other (groups all other race/ethnicity groups); **Data collected December 2020 to March 2021**

Time Trends in Mental and Physical Health Of Older Adults of Color

Black, Asian, and Latinx

▶ **More than 1/3 of elders had elevated rates of mental health symptoms (35.5%) across all three racial/ethnic groups. Rates (2 in 5) were especially high among Latinx older adults.**

▶ Time estimates for anxiety or depression suggest a curvilinear trend in the prevalence among Hispanics and Blacks; increasing during the summer months of 2020, dropping down to starting levels by the end of the summer months and into the beginning of fall, then picking up again by winter.

▶ Overall, a linear increase in the prevalence of fair/poor general health over time.

Race/Ethnicity — NHB — NHA — Hispanic

(a) Anxious/Depressed (n=154,064)

(b) Fair/Poor Health (n=137,300)
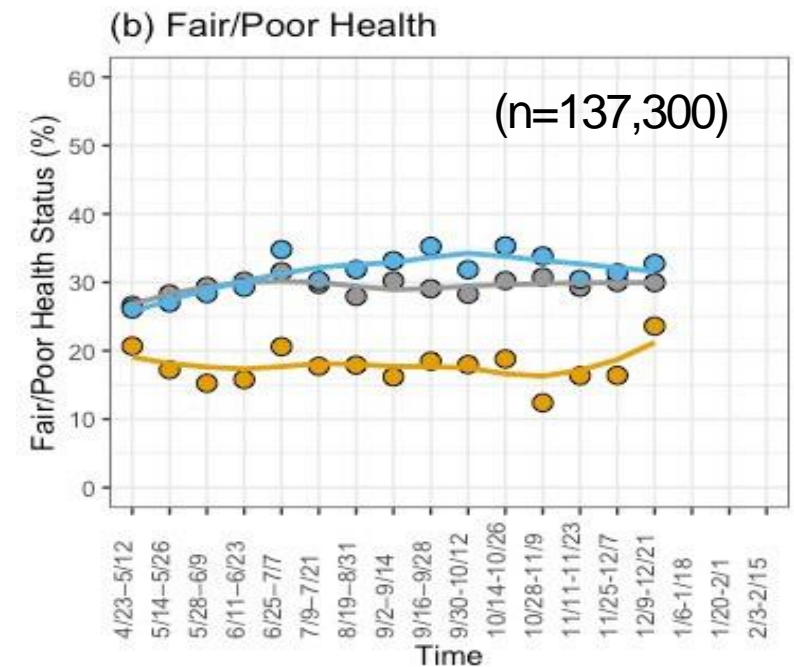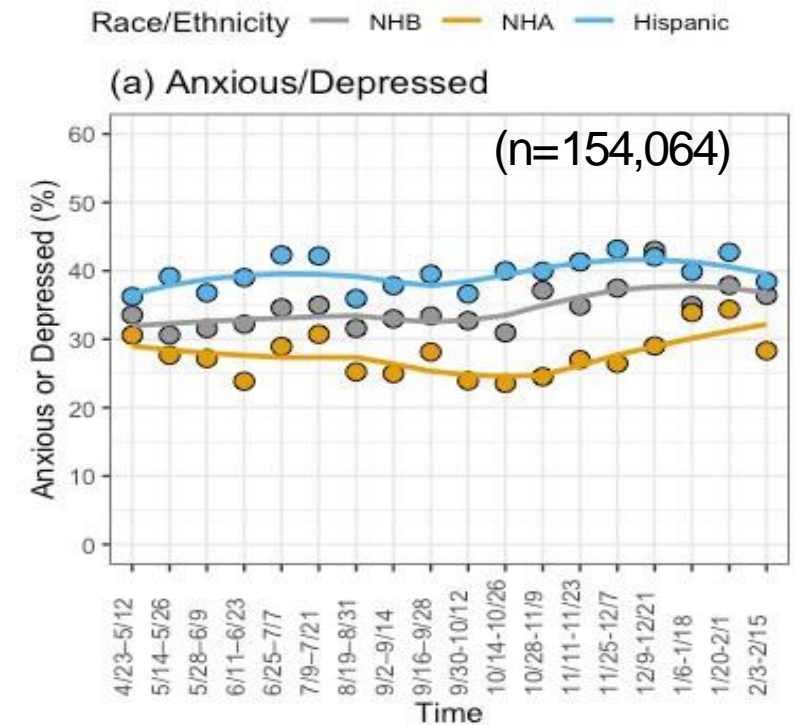
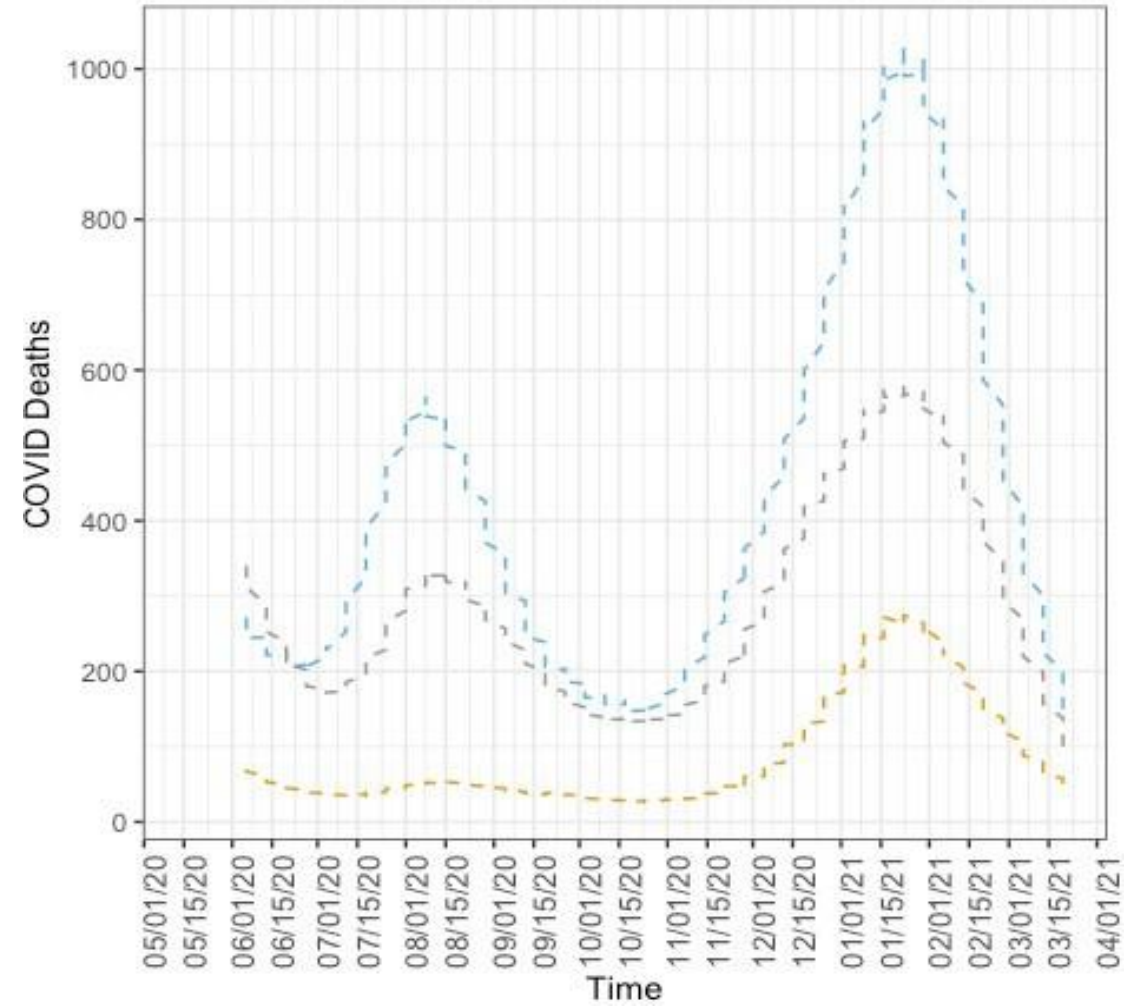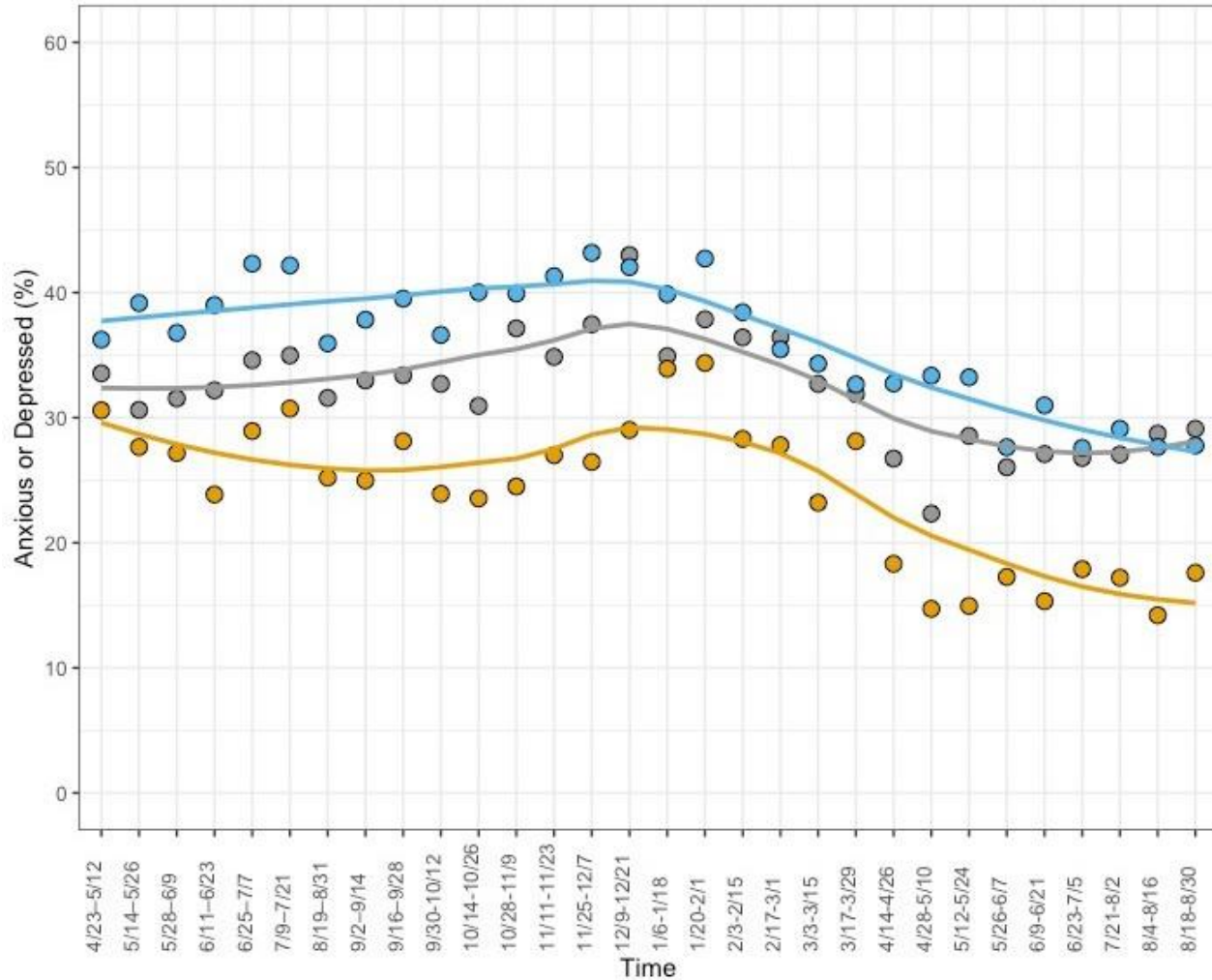# Time Trends in Mental and Physical Health Of Older Elders of Color
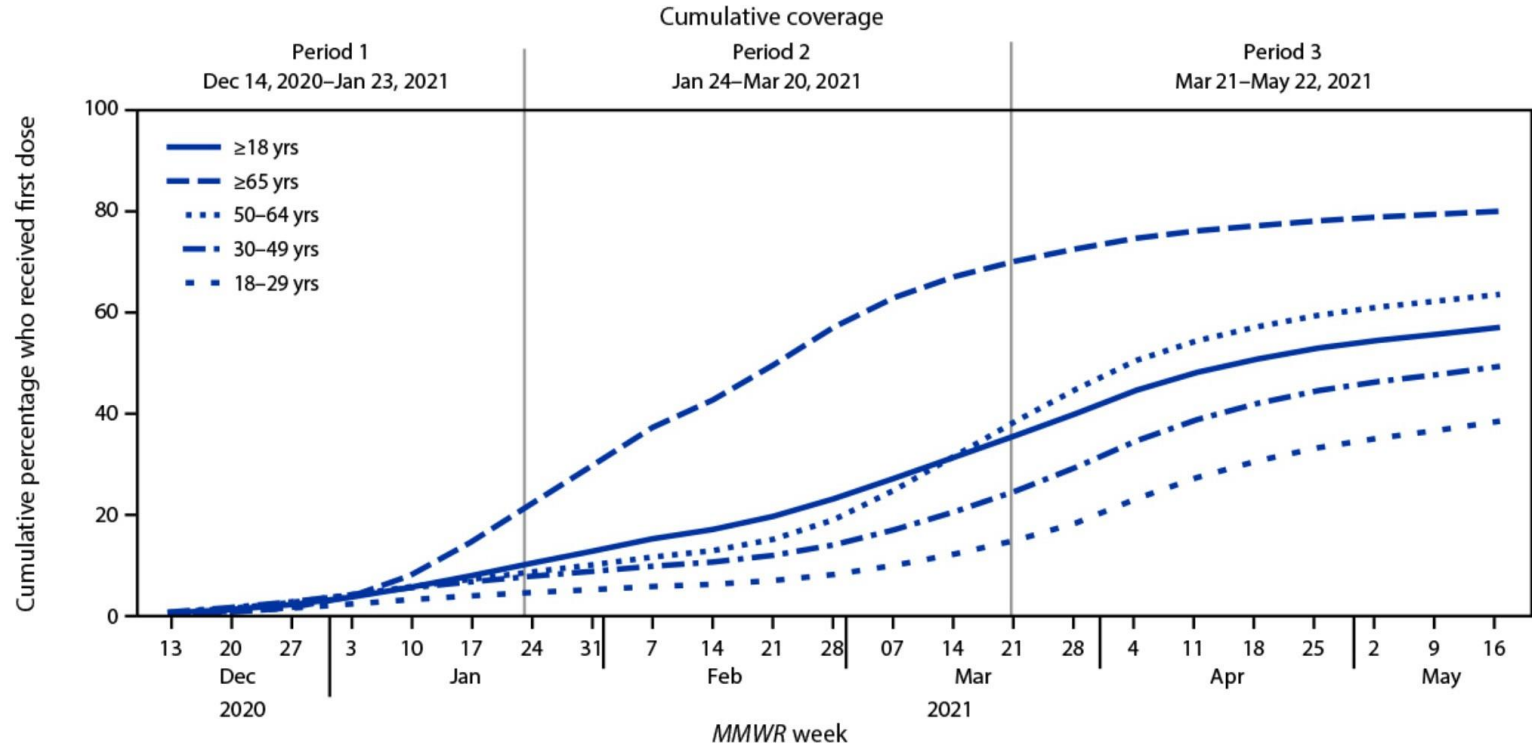
Black, Asian, and Latinx
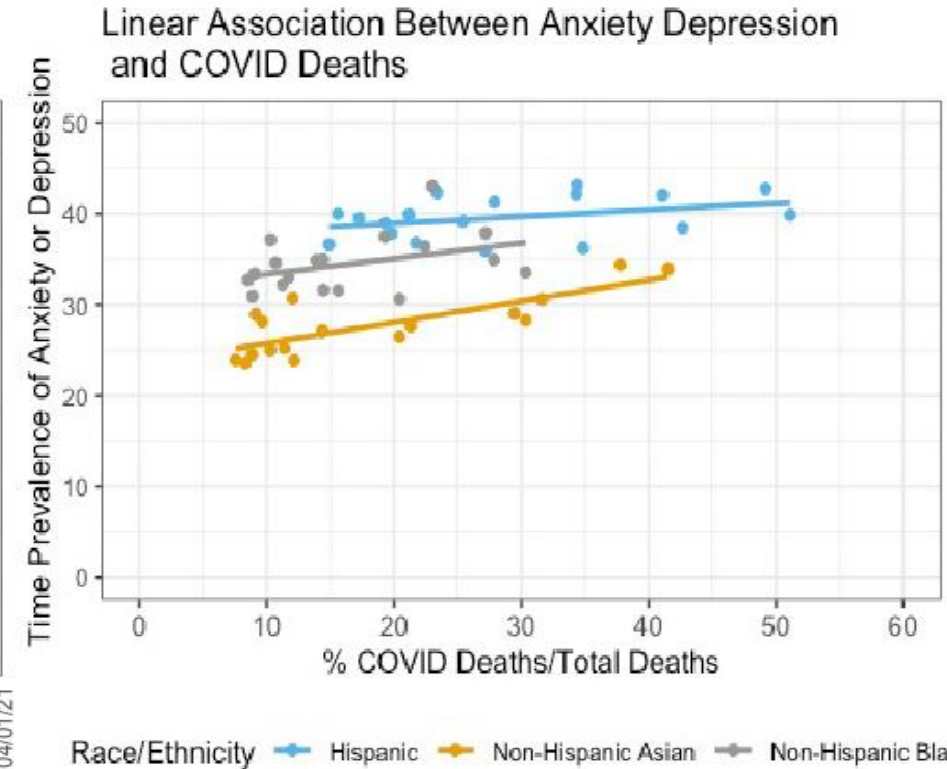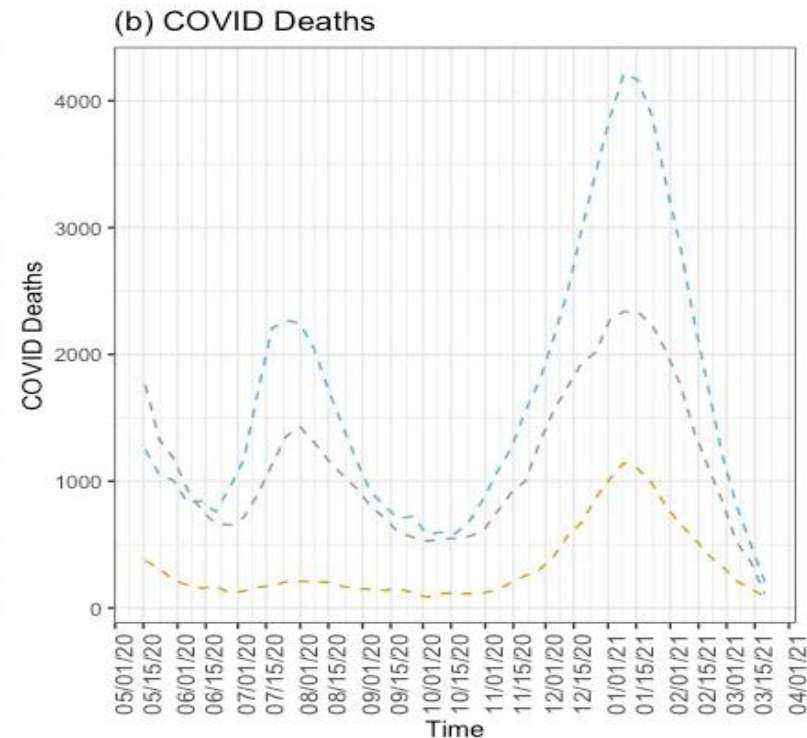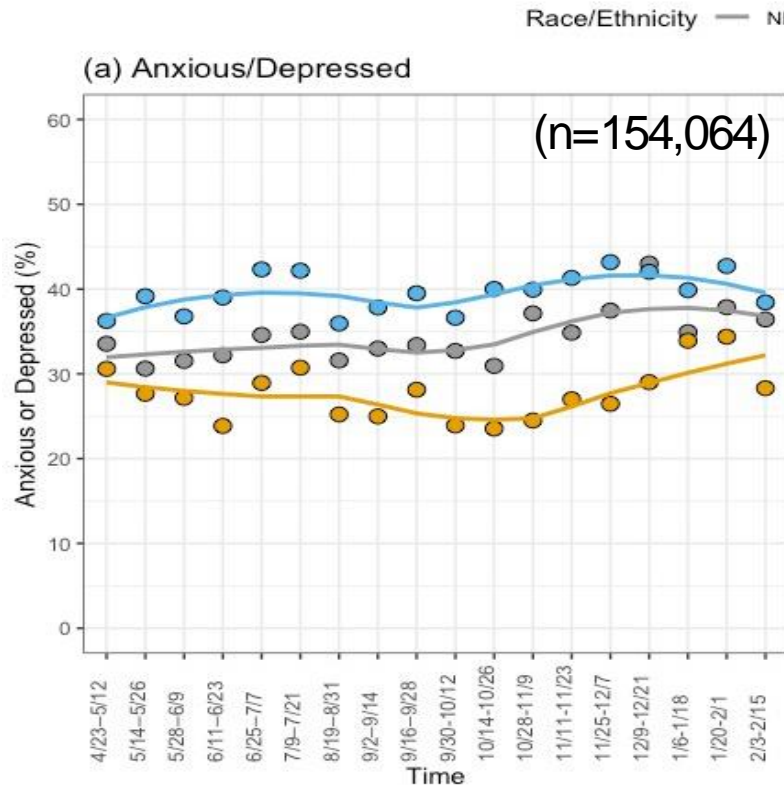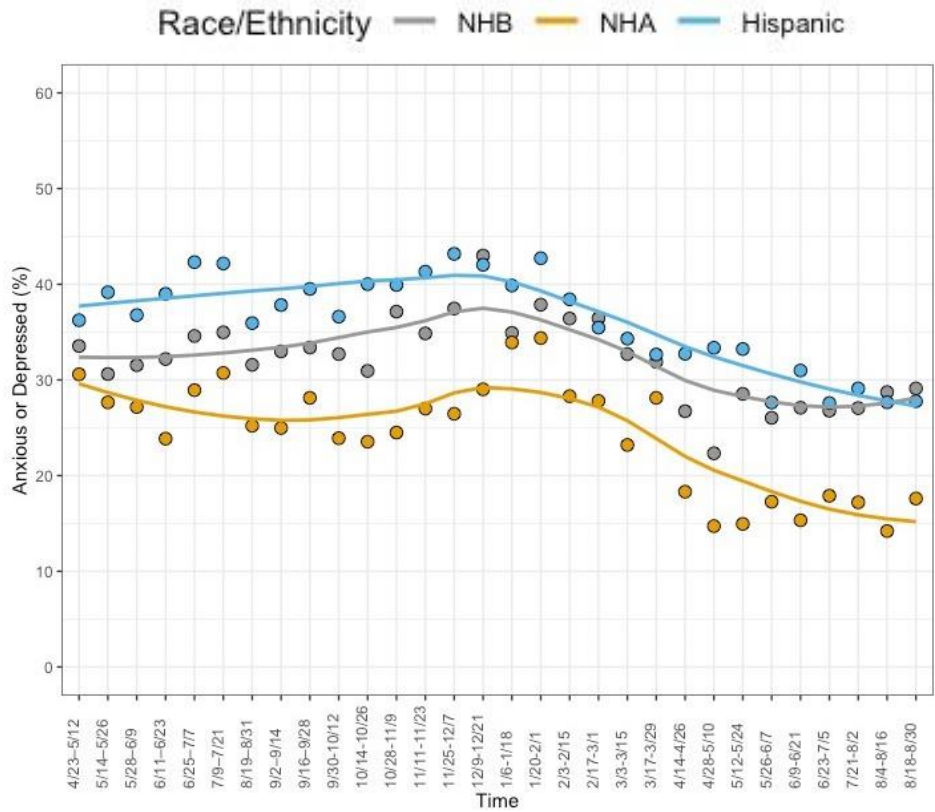

- ► Linear associations between anxiety and depression rates and COVID specific mortality rates (b=0.15, SE=0.03; p<0.01).
- ► Association specifically pronounced among Asians (b=0.23, p<.001), but less sensitive in Older Blacks, and Hispanics.

Time Trends in Mental Health Extended Data

Time Trends in Mental Health Extended Data

Variability in Mental and Physical Health Among Elders of Color

► There is considerable heterogeneity in mental and physical health conditions across groups and regions of the country.

► Both geographic and within group heterogeneities are important to keep in mind regarding mental and physical health among diverse groups.

► **One size fits all policy solutions are likely insufficient** to alleviate these within group differences. *Better state level data are required to enhance precision. Multidimensional interventions with federal, state, and local components are likely required.*

Resilient Aging

(n=154,064)
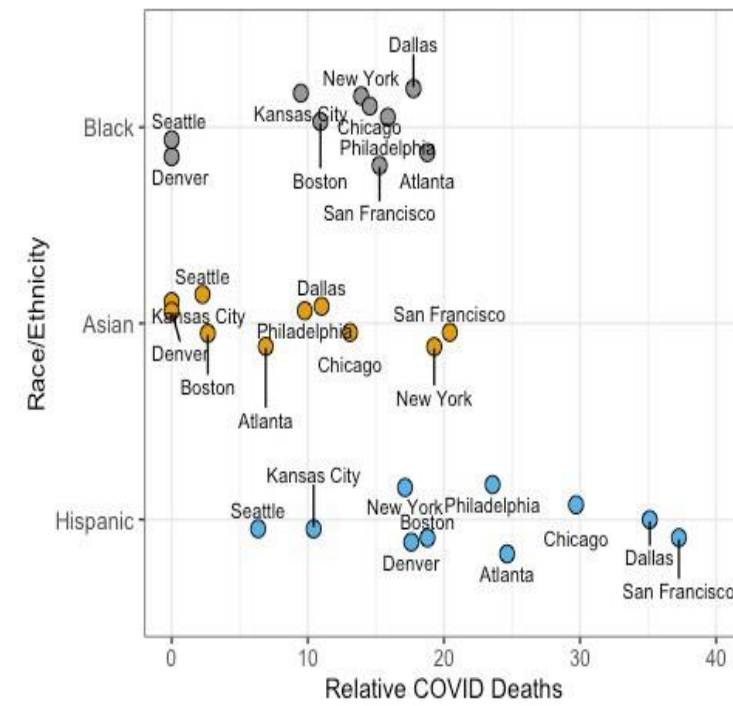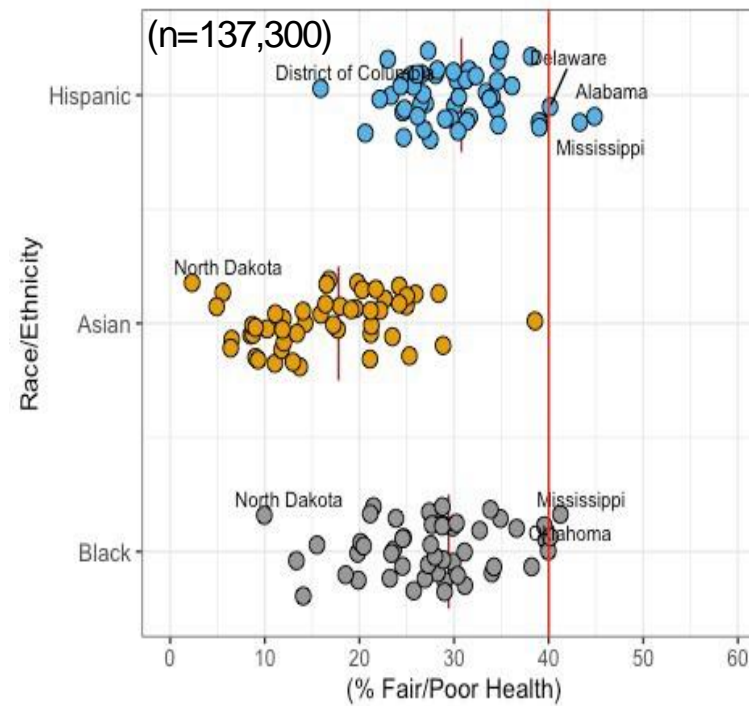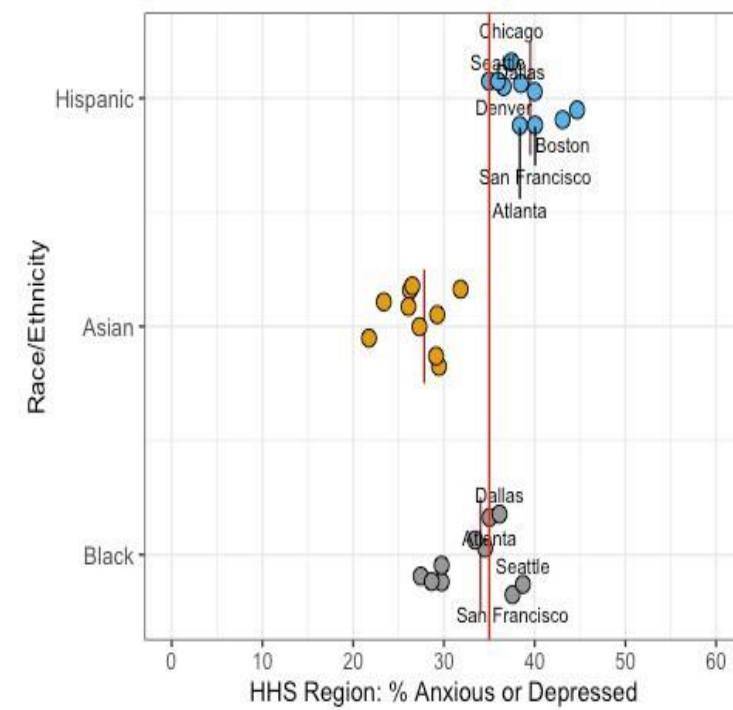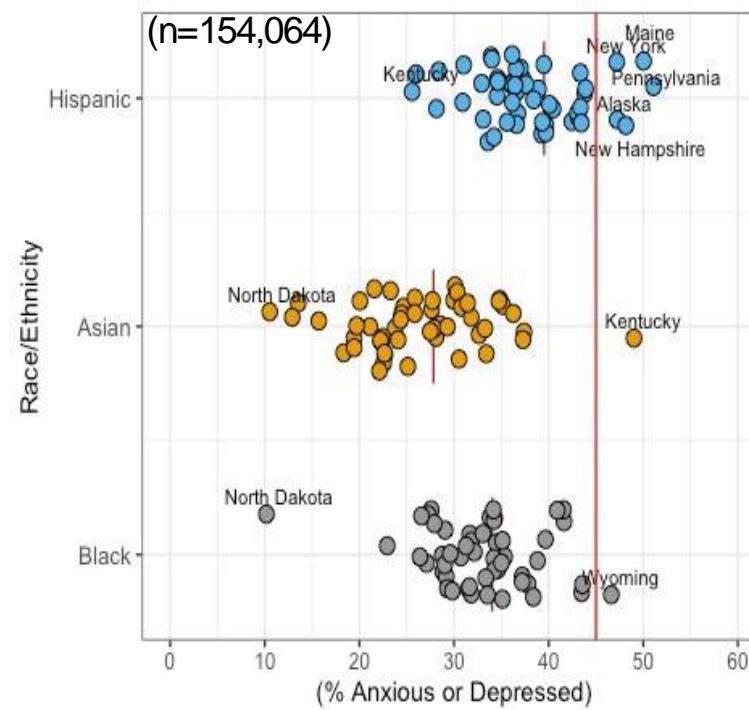
- Resilience against mental health problems comes with aging across elders of color.
- Prevalence of anxiety or depression decreased consistently with age across elders of color:
  - **2 in 5 persons age 50** years reported mental health problems
  - Approximately **1 in 4 persons age 75** years and older reported mental health problems .
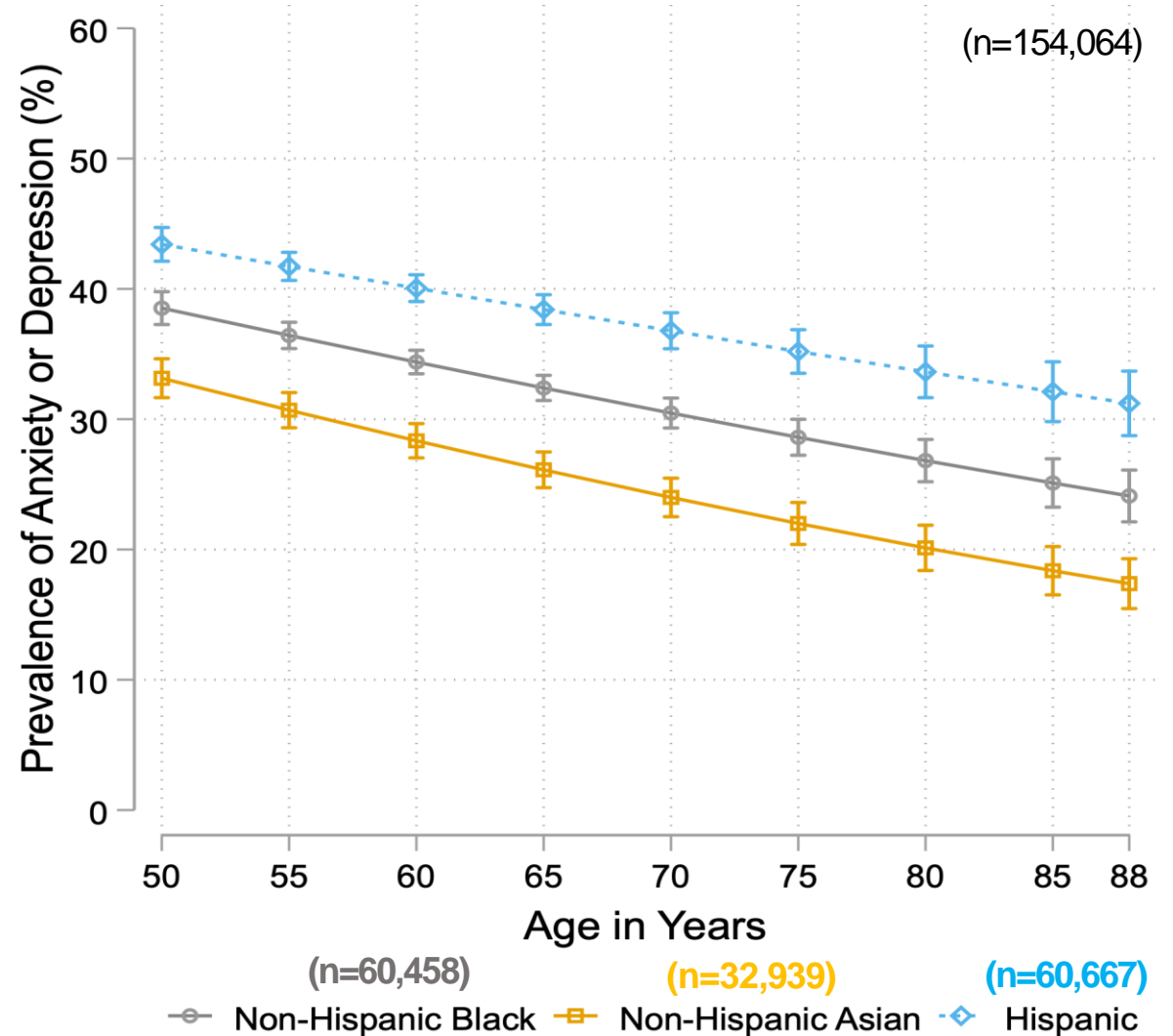
Inequitable Distribution of Mental and General Health

► **Social Determinants of Health (SDH)** significant drivers of mental and general health problems.
► Significant mental health symptoms occur **when basic needs are not met**.
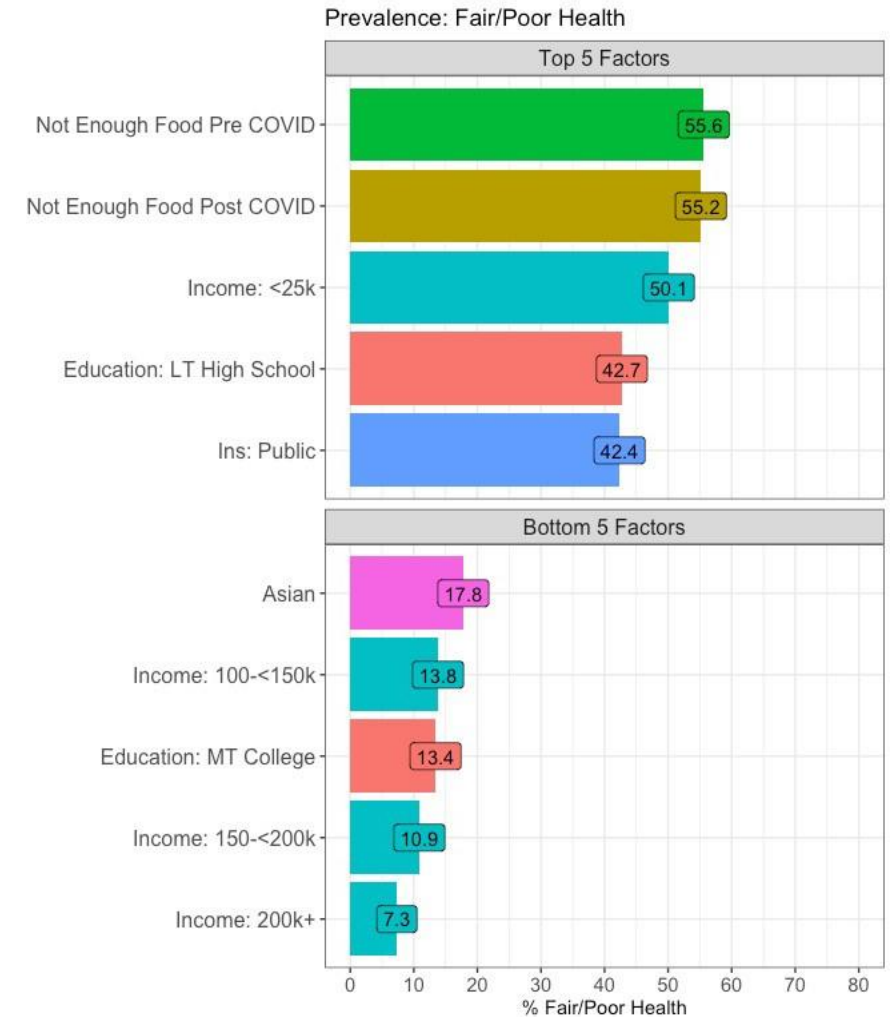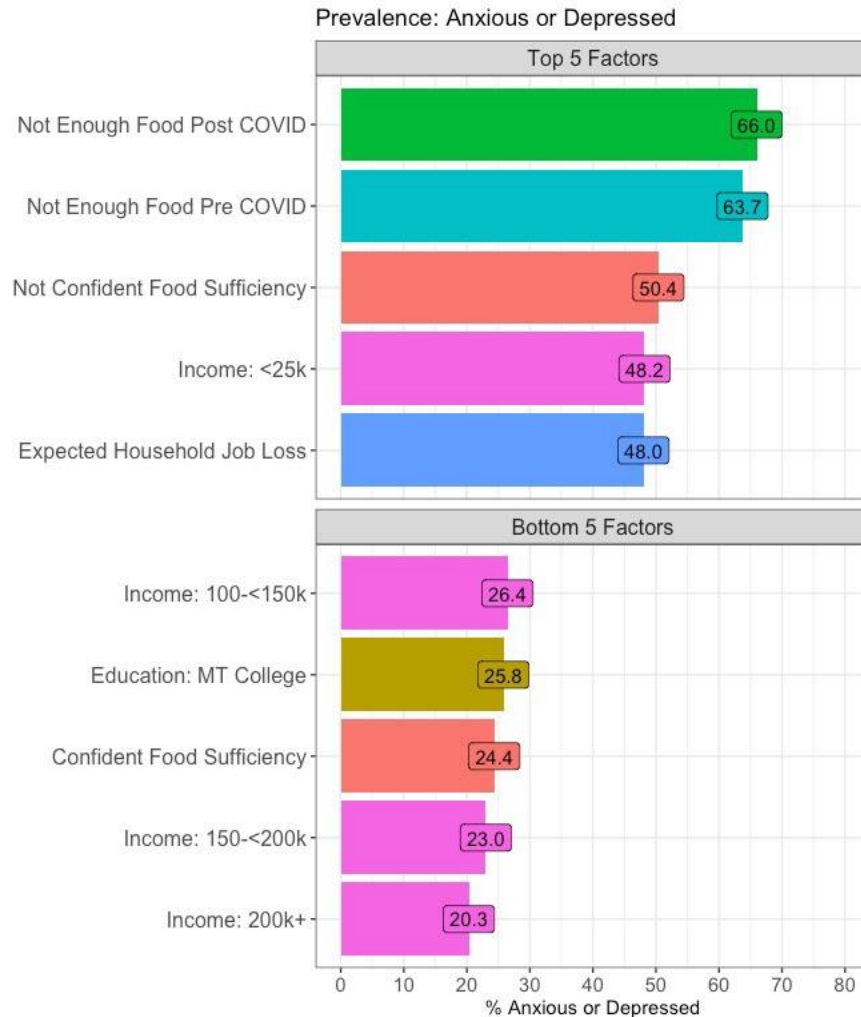► The #1 factor impacting elders' physical and mental health status is **food insecurity.**

Prevalence: Anxious or Depressed

Top 5 Factors

Factor	% Anxious or Depressed
Not Enough Food Post COVID	66.0
Not Enough Food Pre COVID	63.7
Not Confident Food Sufficiency	50.4
Income: <25k	48.2
Expected Household Job Loss	48.0

Bottom 5 Factors

Factor	% Anxious or Depressed
Income: 100-<150k	26.4
Education: MT College	25.8
Confident Food Sufficiency	24.4
Income: 150-<200k	23.0
Income: 200k+	20.3

Prevalence: Fair/Poor Health

Top 5 Factors

Factor	% Fair/Poor Health
Not Enough Food Pre COVID	55.6
Not Enough Food Post COVID	55.2
Income: <25k	50.1
Education: LT High School	42.7
Ins: Public	42.4

Bottom 5 Factors

Factor	% Fair/Poor Health
Asian	17.8
Income: 100-<150k	13.8
Education: MT College	13.4
Income: 150-<200k	10.9
Income: 200k+	7.3

Variations In Mental Health Problems within Racial and Ethnic Groups

Basic needs are consistent drivers of elevated mental health problems **across race/ethnic groups.**

Latinx elders appear to be most impacted by food insecurity during COVID.

Prevalence: Anxiety or Depression
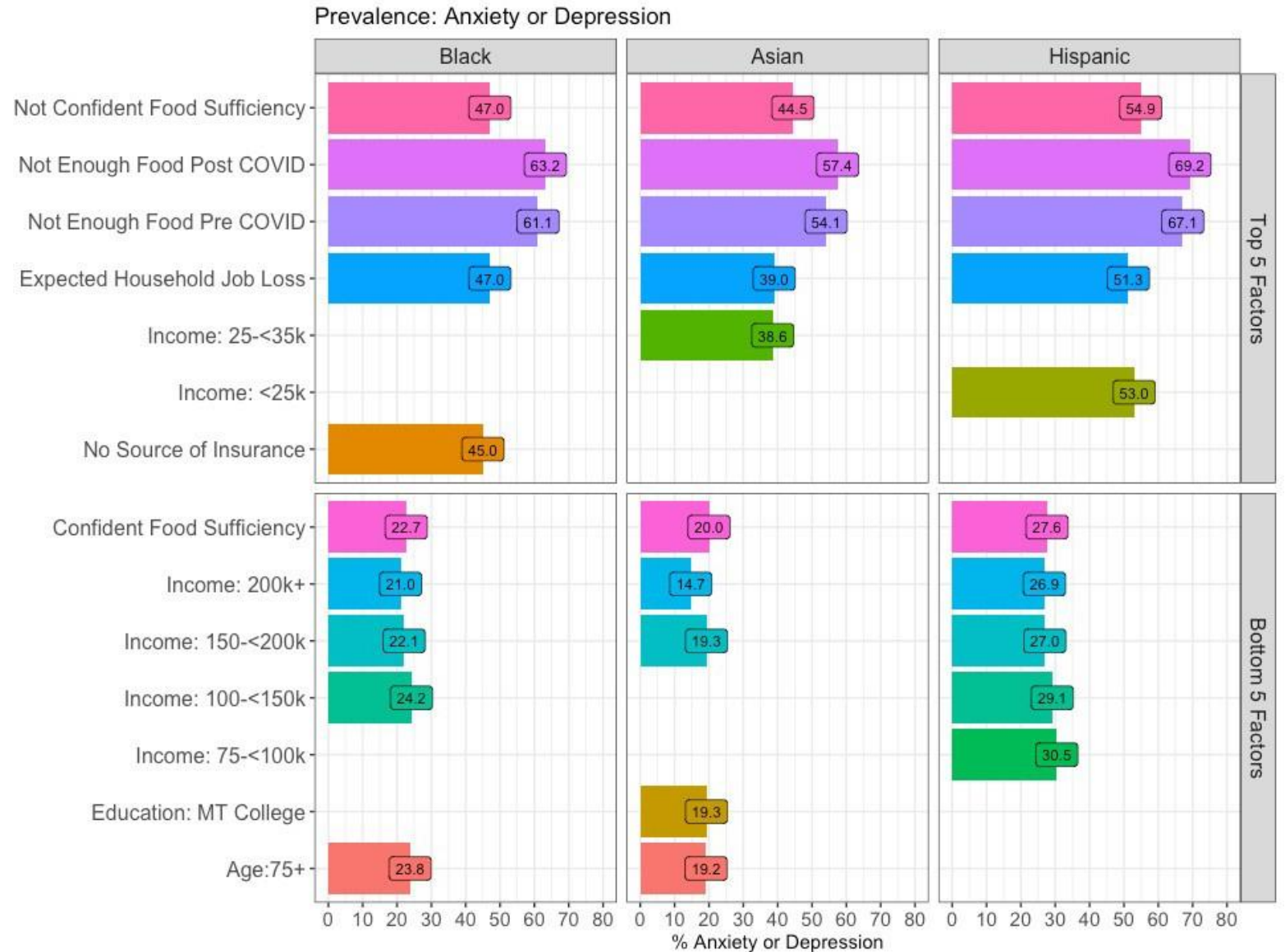
High Prevalence SDH linked to Mental Health Problems among Racial/Ethnic Older Adults

	Black %(SE)	Asian %(SE)	Hispanic %(SE)	Total %(SE)
Not Enough Food Pre COVID	12.88 (0.36)	5.70 (0.44)	14.42 (0.45)	12.49 (0.26)
Not Enough Food Post COVID	13.48 (0.34)	5.99 (0.38)	15.57 (0.41)	13.28 (0.24)
Not Confident Food Sufficiency	45.29 (0.52)	29.12 (0.73)	43.43 (0.58)	41.94 (0.35)
Income <25K	16.74 (0.36)	8.44 (0.42)	16.28 (0.39)	15.28 (0.24)
Expected HH Job Loss	32.71 (0.42)	34.42 (0.68)	41.09 (0.50)	36.76 (0.30)
LTHS Education	9.78 (0.36)	12.45 (0.76)	26.06 (0.55)	17.56

Health of Indigenous populations:
IWRI COVID-19 Communities of Color

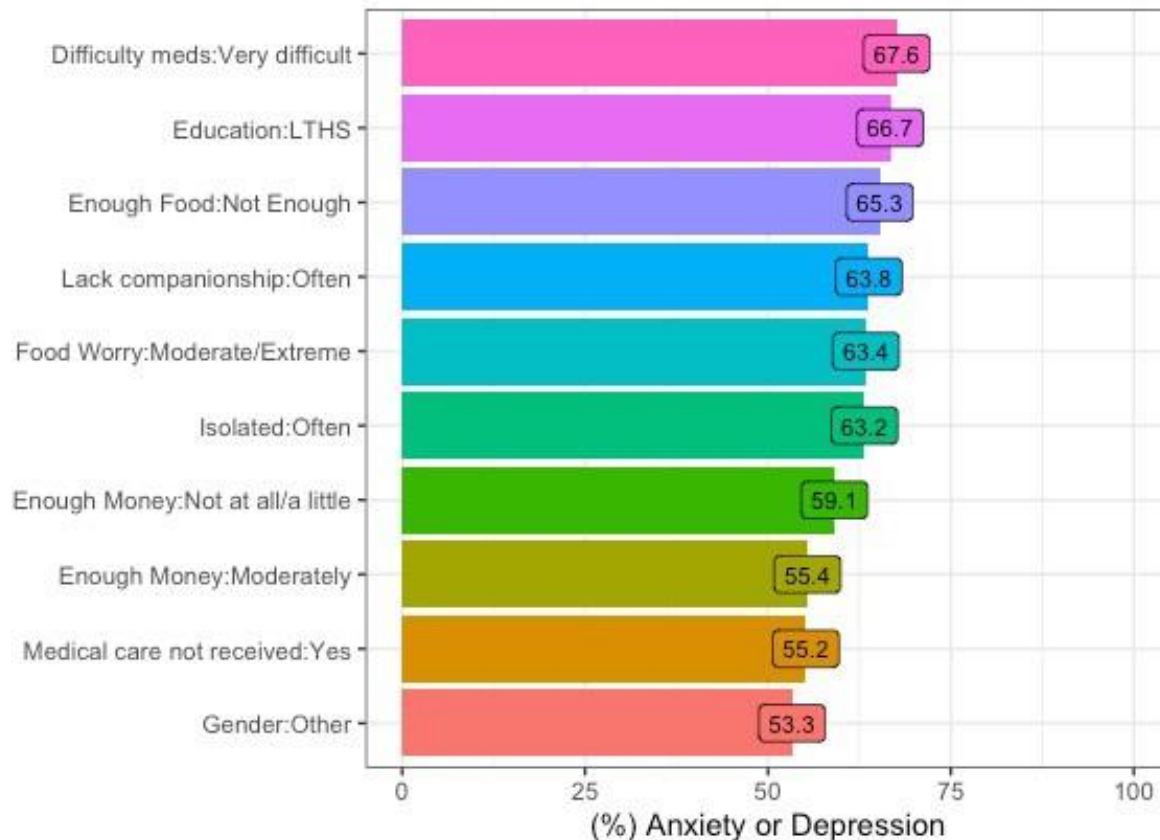- **2 in 5 (40.2%) older adults participating in the IWRI survey met criteria for elevated anxiety/depression symptoms.**

- As with other race/ethnic groups prevalence of anxiety or depression decreased consistently with age across elders of color:
  - **1 in 2 individuals ages 50-59 years (49.7%)** years met criteria for elevated mental health problems
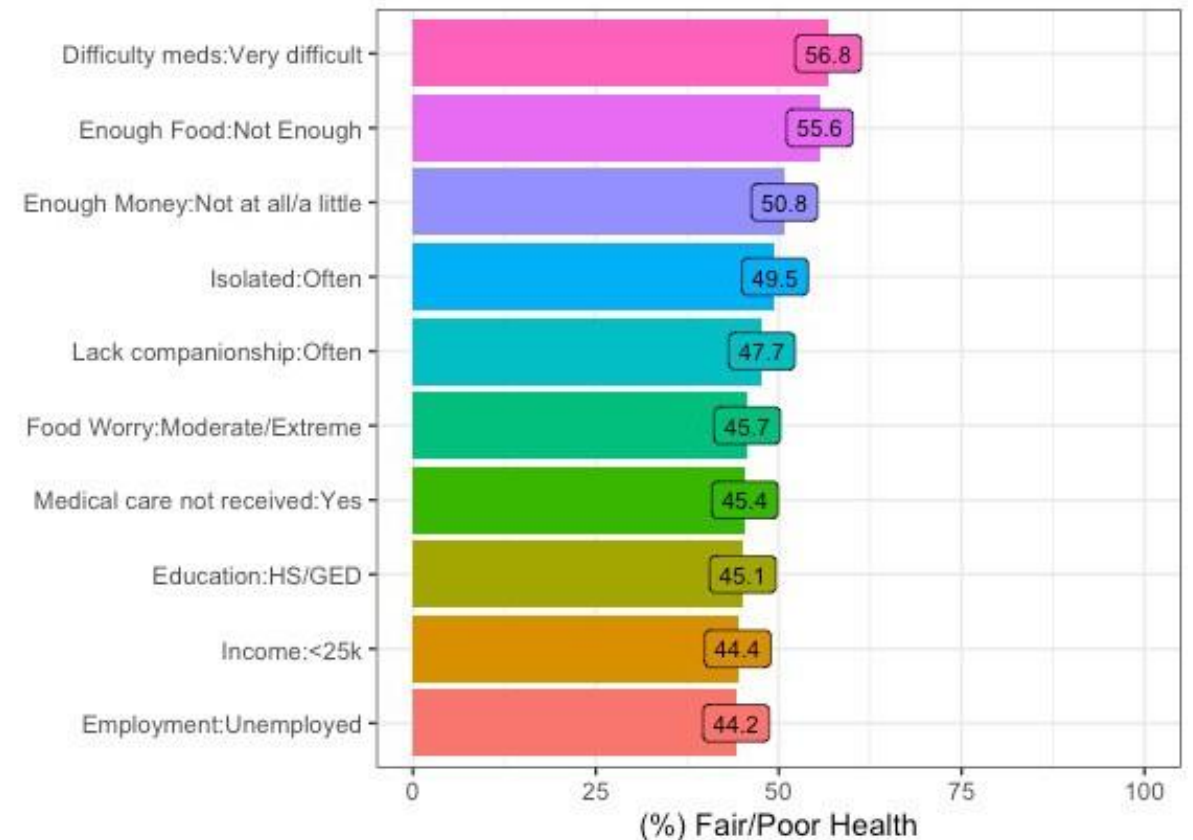 - **1 in 4 individuals age 70** years and older met similar criteria.
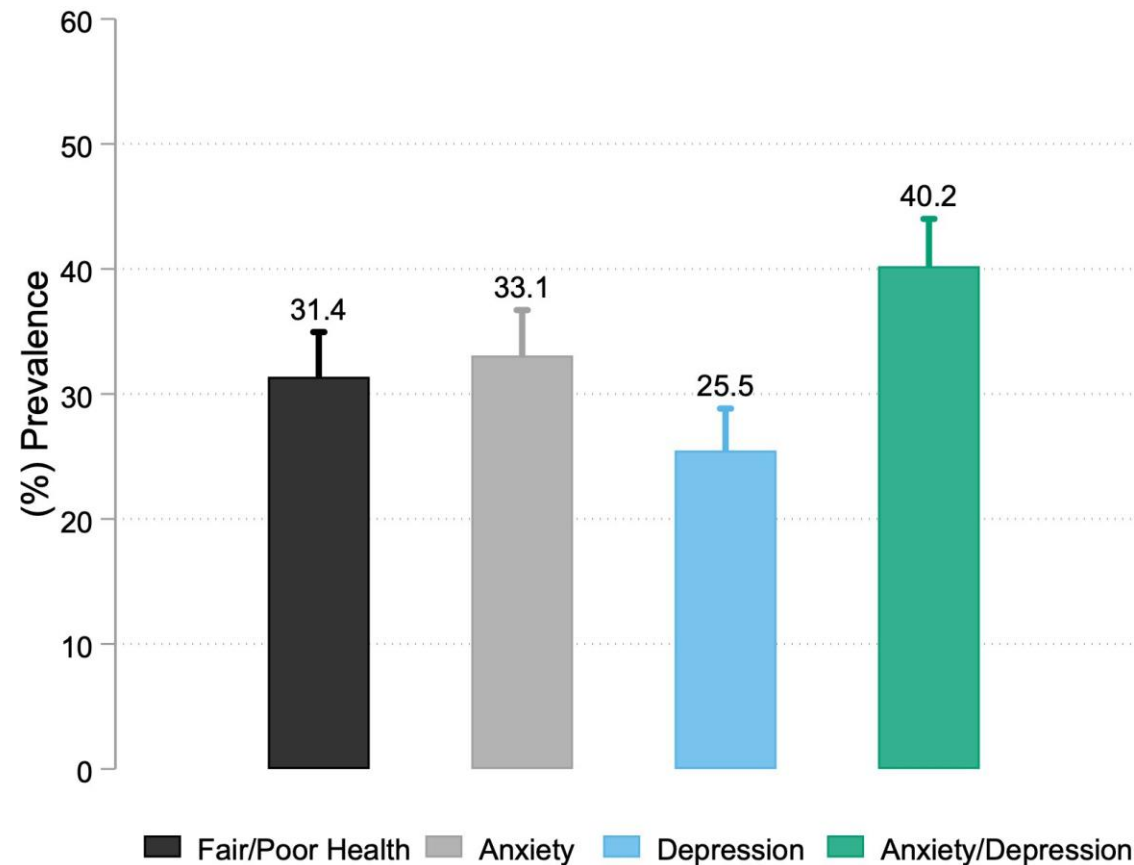
Inequitable Distribution of Mental and General Health

► **Social Determinants of Health (SDH)** significant drivers of mental and general health problems.
► Significant mental health symptoms occur **when basic needs are not met**.
► Inability to secure medications, low education, and not having enough food primary drivers
► Social isolation and loneliness are also major drivers of elevated mental and general health problems

(a) Top 10 Drivers of Anxiety/Depression

Driver	% Anxiety or Depression
Difficulty meds:Very difficult	67.6
Education:LTHS	66.7
Enough Food:Not Enough	65.3
Lack companionship:Often	63.8
Food Worry:Moderate/Extreme	63.4
Isolated:Often	63.2
Enough Money:Not at all/a little	59.1
Enough Money:Moderately	55.4
Medical care not received:Yes	55.2
Gender:Other	53.3

(b) Top 10 Drivers of Fair/Poor Health

Driver	% Fair/Poor Health
Difficulty meds:Very difficult	56.8
Enough Food:Not Enough	55.6
Enough Money:Not at all/a little	50.8
Isolated:Often	49.5
Lack companionship:Often	47.7
Food Worry:Moderate/Extreme	45.7
Medical care not received:Yes	45.4
Education:HS/GED	45.1
Income:<25k	44.4
Employment:Unemployed	44.2

High Prevalence SDH linked to Mental Health Problems among Racial/Ethnic Older Adults

Risk Factors	Total %(SE)
Income <25k	25.67 (1.74)
LTHS Education	6.57 (0.98)
Expected job/income loss	43.99 (1.96)
Enough Money: Not at all/a little	20.72 (1.61)
Need Help with Food	35.71 (1.89)
Moderate/Extreme Food Worry	27.84 (1.85)
Not Enough Food	11.23 (1.25)

Social, Mental, and Behavioral Risks

Risk Factor	Risk Group	Total %(SE)
Often Lack companionship		20.50 (1.60)
Ofen Isolated		28.62 (1.79)
Frequency of suicidal thoughts	Several days	12.48 (1.31)
	More than half the days	5.30 (0.89)
	Nearly every day	1.87 (0.54)
Serious consideration of suicide		9.84 (1.18)
Alcohol consumption (4+/5+)	Weekly	6.72 (0.99)
	Daily or almost daily	4.06 (0.78)

Health Protective Factors

(a) Bottom 10 Drivers of Anxiety/Depression

Factor	(%) Anxiety or Depression
Isolated:Hardly ever	16.3
Lack companionship:Hardly ever	21.5
Age:70+	25.0
Enough Money:Completely	25.6
Education:Graduate	25.9
Enough Money:Mostly	29.8
Income:100k+	30.5
Age:60-69	31.1
Medical care not received:No Need	31.3
Food Worry:Not at all/A little	32.5

(b) Bottom 10 Drivers of Fair/Poor Health

Factor	(%) Fair/Poor Health
Enough Money:Completely	13.8
Medical care not received:No Need	18.7
Isolated:Hardly ever	18.7
Education:Graduate	18.9
Income:100k+	19.0
Lack companionship:Hardly ever	21.9
Income:50-<100k	22.2
Age:70+	22.5
Difficulty meds:Not difficult	23.0
Need Help with Food:No	24.6

Social Determinants of Health

Acknowledgements

□ Support from the American Psychological Association, Office on Aging

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DeAnnah Byrd

Thank you
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