

Reclaiming Community: How to Heal Ourselves and #EndTB

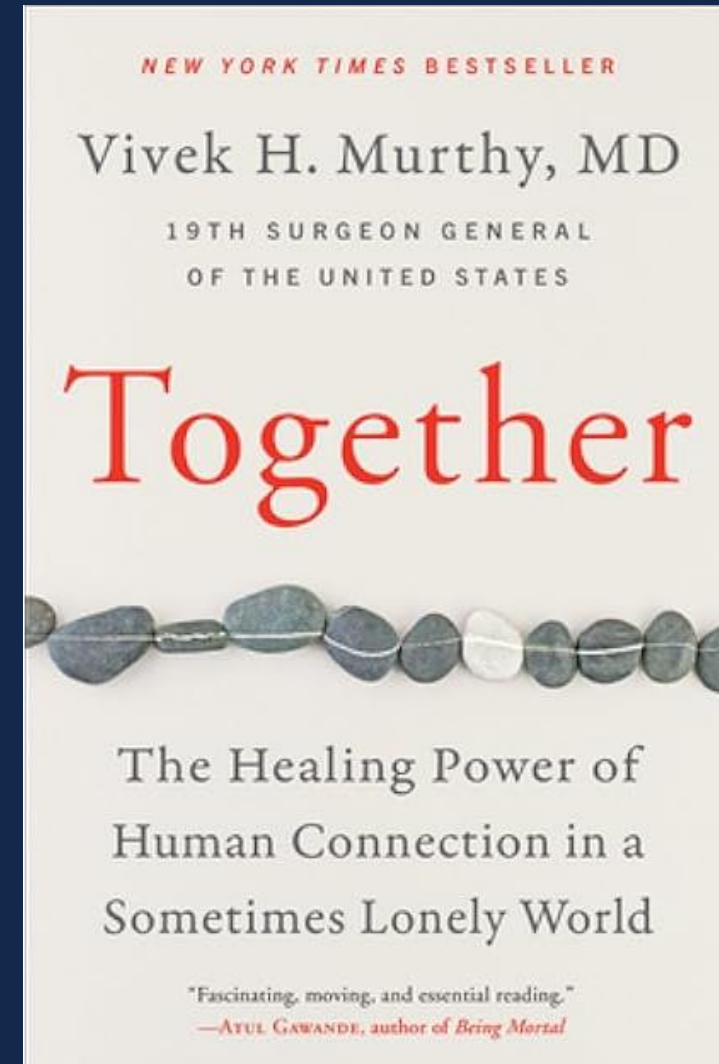
Maria Almond, MD, MPH



Keeping the Heart of Virginia Healthy

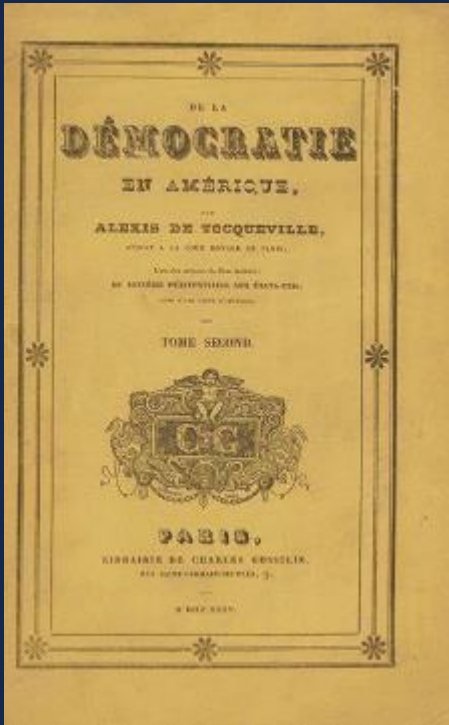
Healing and Human Connection

"...[loneliness] serves a vital function by warning us when something essential for our survival - social connection - is lacking." --Dr. Vivek Murthy

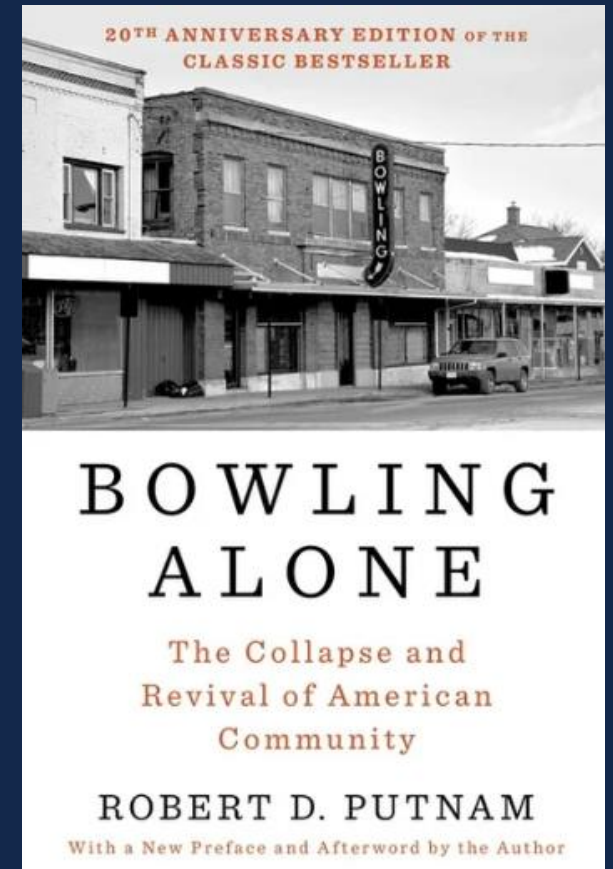


Growing Disconnection

2024 American Social Capital Survey



- Decline in civic engagement and fewer connections particularly in those with fewer years of formal education
- No longer society of “joiners”. Noted declines in membership with organized institutions--particularly marriage, religious organizations, and labor unions.
- Increasing division of social and civic resources.

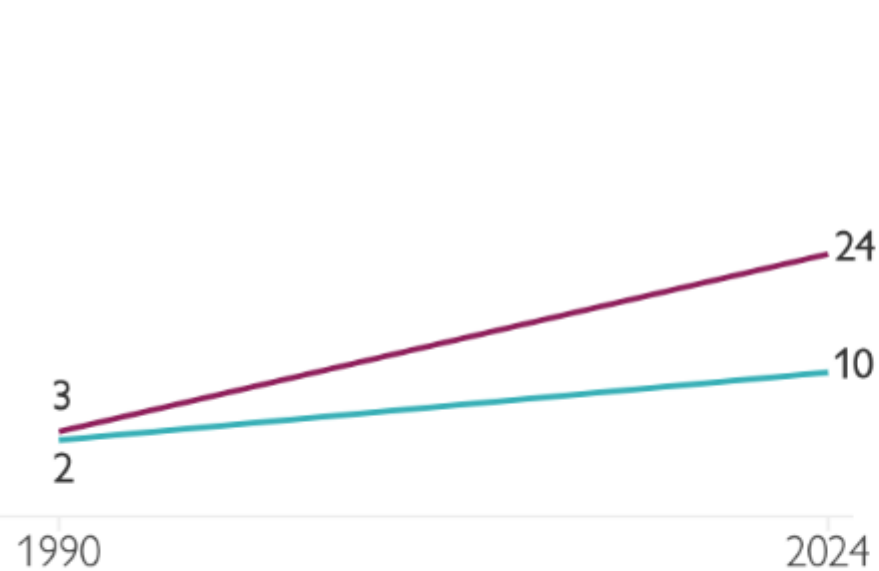


The Growing Class Divide in American Friendship

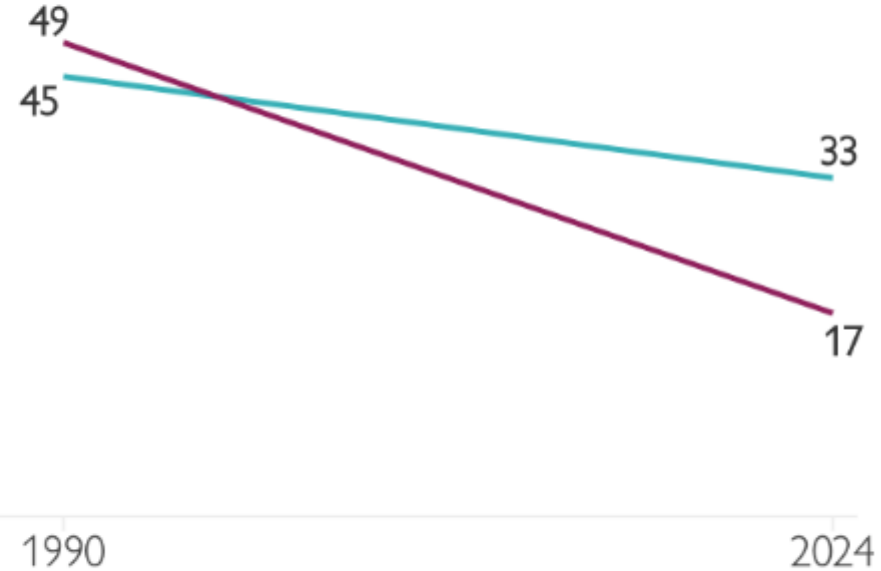
Percentage of Americans who report having the following number of close friends

■ Bachelor's Degree or Higher ■ High School or Less

No Close Friends

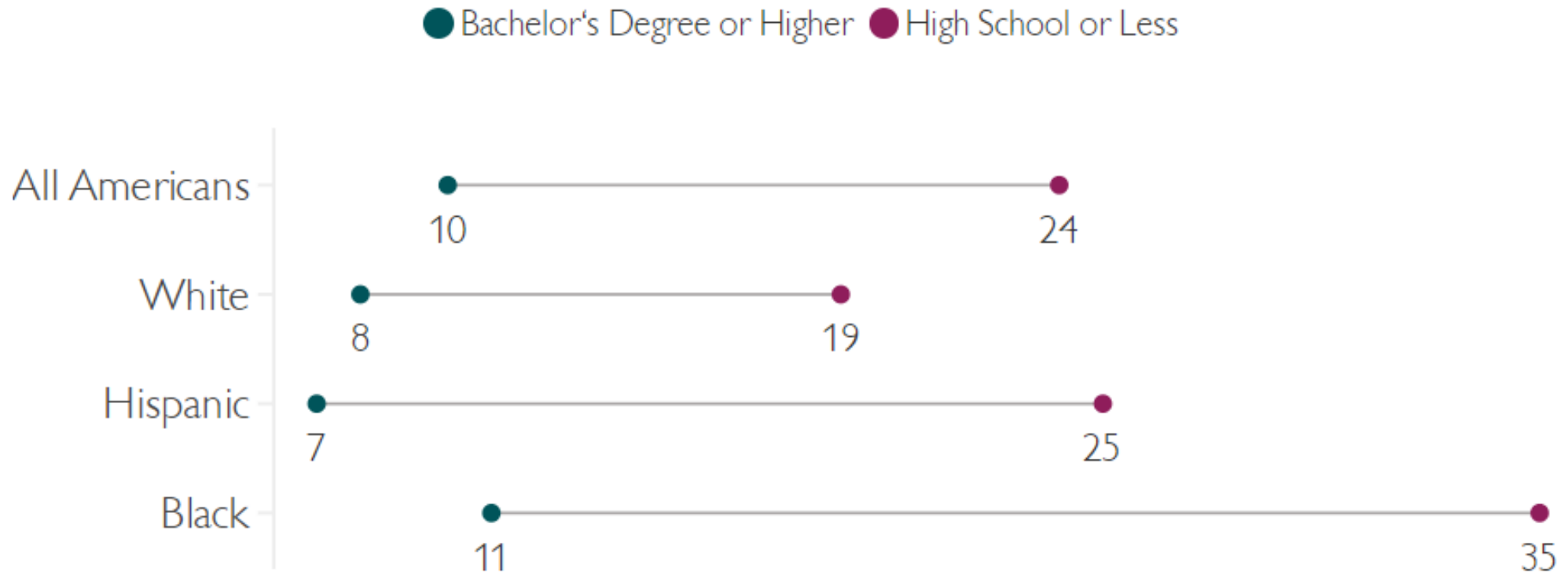


At Least Six Close Friends



Note: Survey of US adults (N= 6,597). Gallup survey conducted over the telephone.
Source: Gallup News Service Poll, 1990; American Social Capital Survey, 2024.

Percentage of Americans who say they have no close friends



Note: Survey of US adults (N=6,597).
Source: American Social Capital Survey, 2024.

Percentage of Americans who report having multiple people who would be willing and able to . . .

● All Americans ● High School or Less ● Bachelor's Degree or Higher

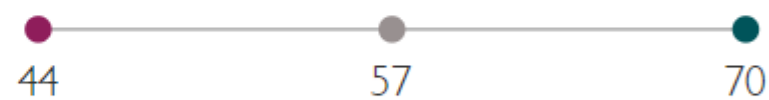
Take You to a Doctor's Appointment



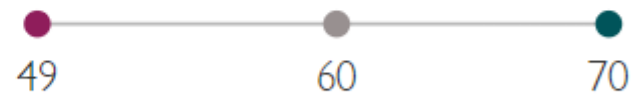
Give You a Ride



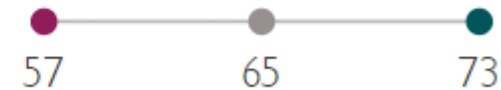
Loan You \$200



Offer You a Place to Stay



Help You Move



Note: Survey of US adults (N=6,597).
Source: American Social Capital Survey, 2024.

Insufficient social connection

- 29% increased risk of heart disease
- 32% increased risk of stroke
- 50% increased risk of developing dementia for older adults
- 60% increased risk of premature death
- Loneliness and social isolation in childhood increase the risk of depression and anxiety both immediately and well into the future

[Social Relationships and Mortality Risk: A Meta-analytic Review](#)

Holt-Lunstad J, Smith TB, Layton JB (2010) Social Relationships and Mortality Risk: A Meta-analytic Review. PLOS Medicine 7(7): e1000316. <https://doi.org/10.1371/journal.pmed.1000316>

Our Epidemic of Loneliness and Isolation



2023

The U.S. Surgeon General's Advisory on the
Healing Effects of Social Connection and Community



HOLT-LUNSTAD, ROBLES, AND SBARRA

A Comparison of Decreased Mortality across Social Connection and Leading Health Indicators

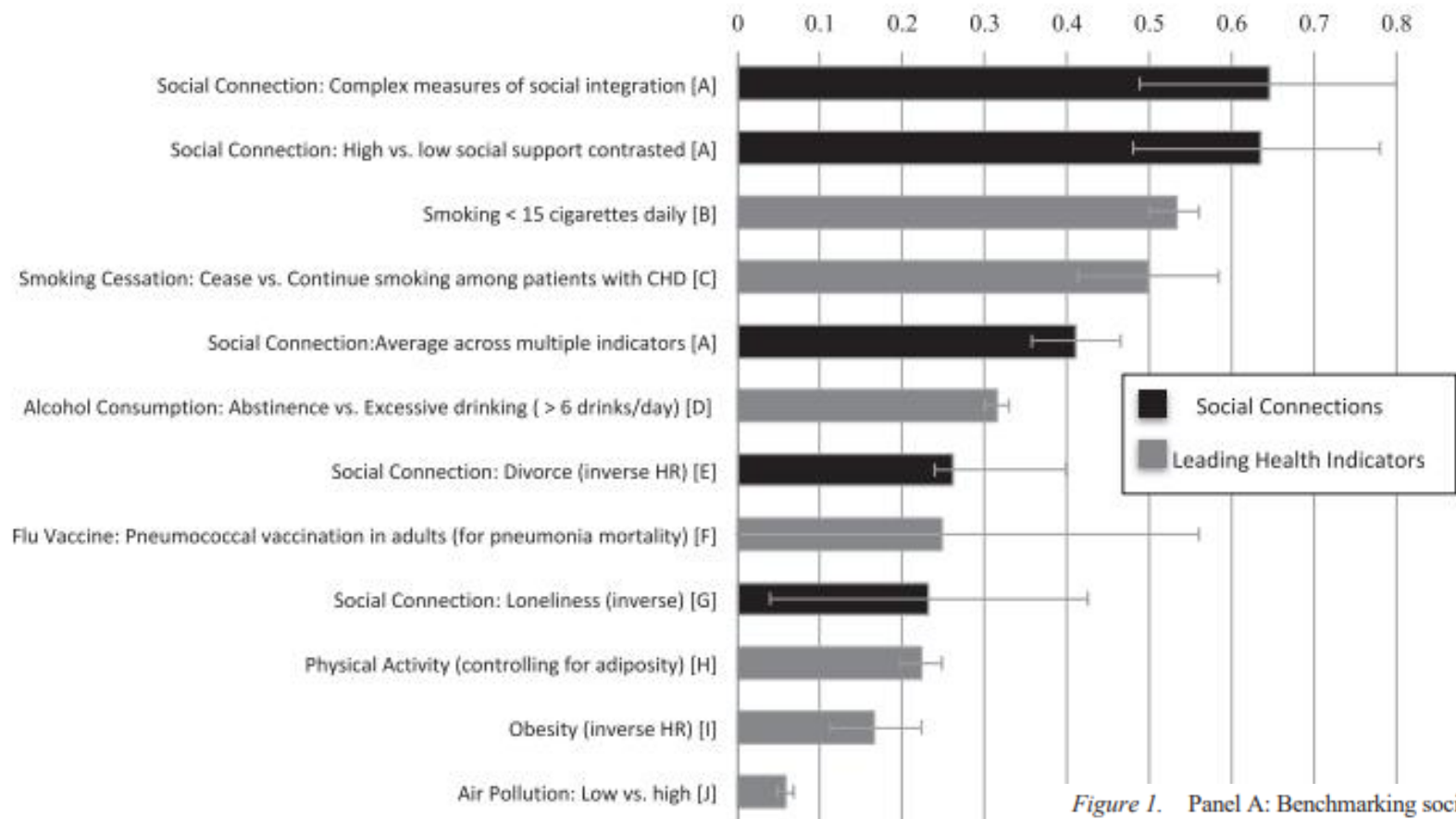
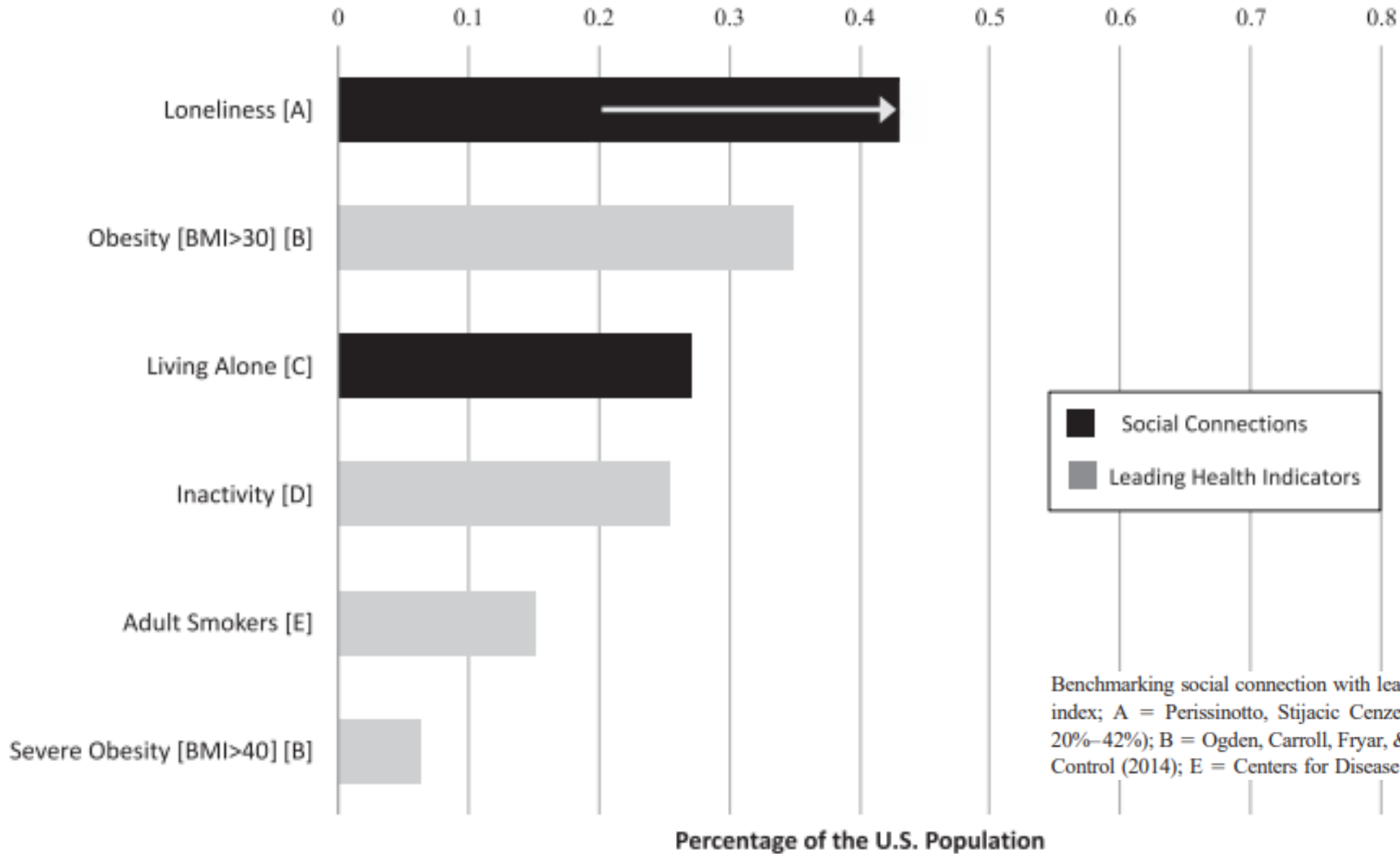


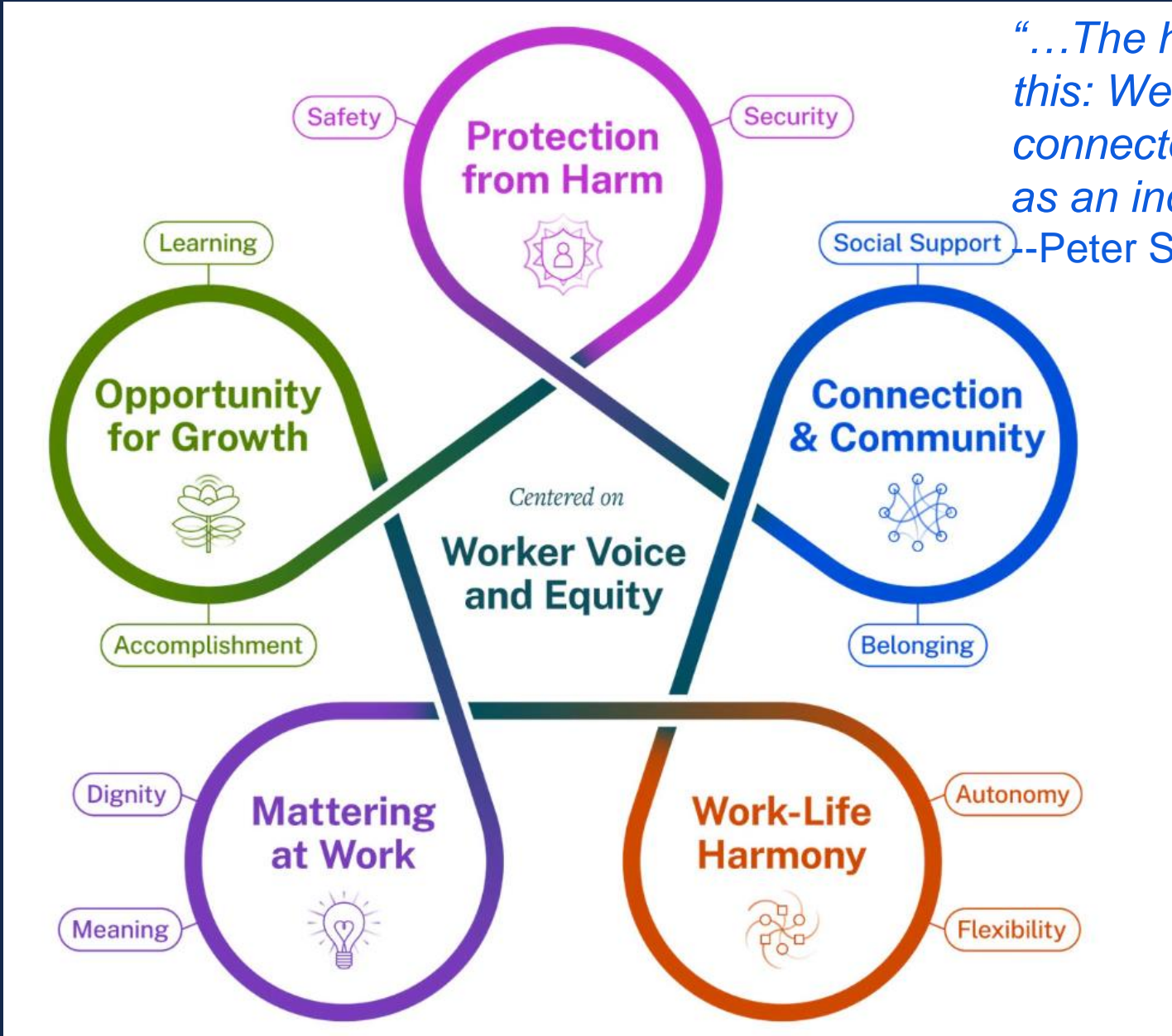
Figure 1. Panel A: Benchmarking social connection with leading health indicators on decreased odds for mortality. An effect size of zero indicates no effect. The effect sizes were estimated from meta-analyses. 95% Confidence Interval. OR = Odds ratio; HR = hazards ratio; A = Holt-Lunstad, Smith, and Layton (2010); B = Shavelle, Paculdo, Strauss, and Kush (2008); C = Critchley and Capewell (2003); D = Holman, English, Milne, and Winter (1996); E = Shor, Roelfs, Bugyi, and Schwartz (2012); F = Fine et al. (1994); G = Holt-Lunstad et al. (2015); H = Katzmarzyk, Janssen, and Ardern (2003); I = Flegal, Kit, Orpana, and Graubard (2013); J = Schwartz (1994). Panel B:

B Prevalence of Social and Health Conditions in U.S. Adult Population



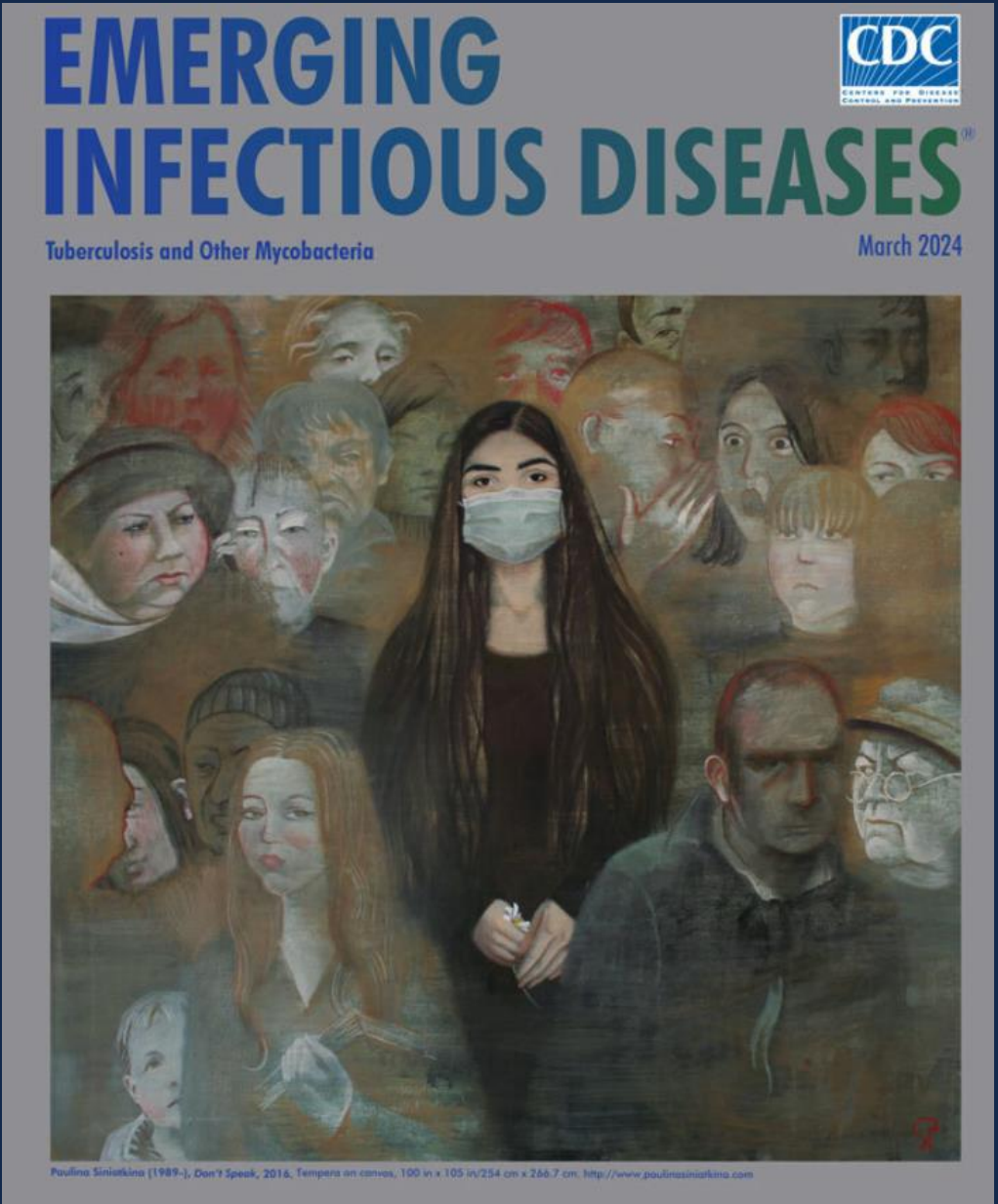
Social Connections
 Leading Health Indicators

Benchmarking social connection with leading health indicators on prevalence in the population. BMI = body mass index; A = Perissinotto, Stijacic Cenzar, and Covinsky (2012; other sources estimate loneliness prevalence as 20%–42%); B = Ogden, Carroll, Fryar, & Flegal (2015); C = U.S. Census Bureau (2011); D = Centers for Disease Control (2014); E = Centers for Disease Control (2016).



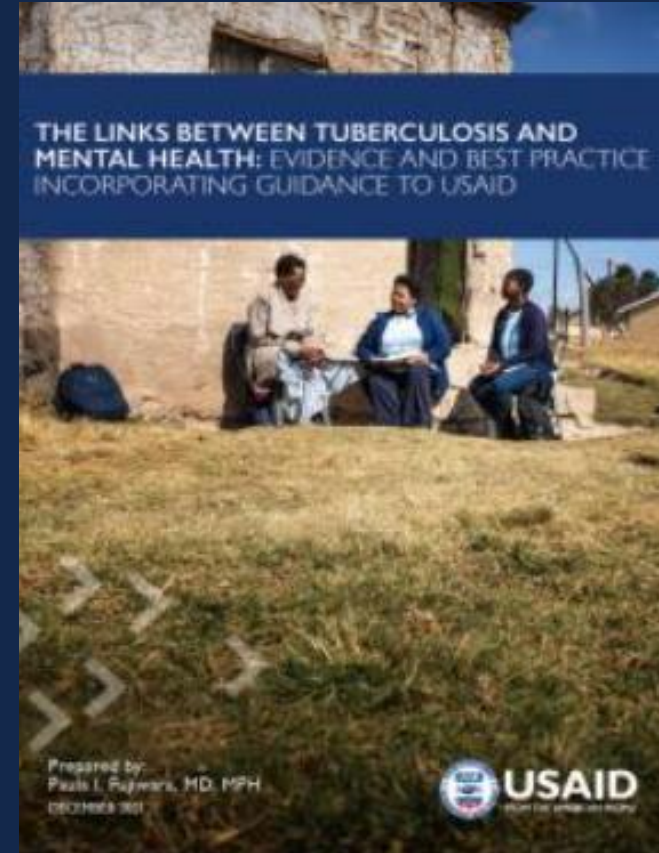
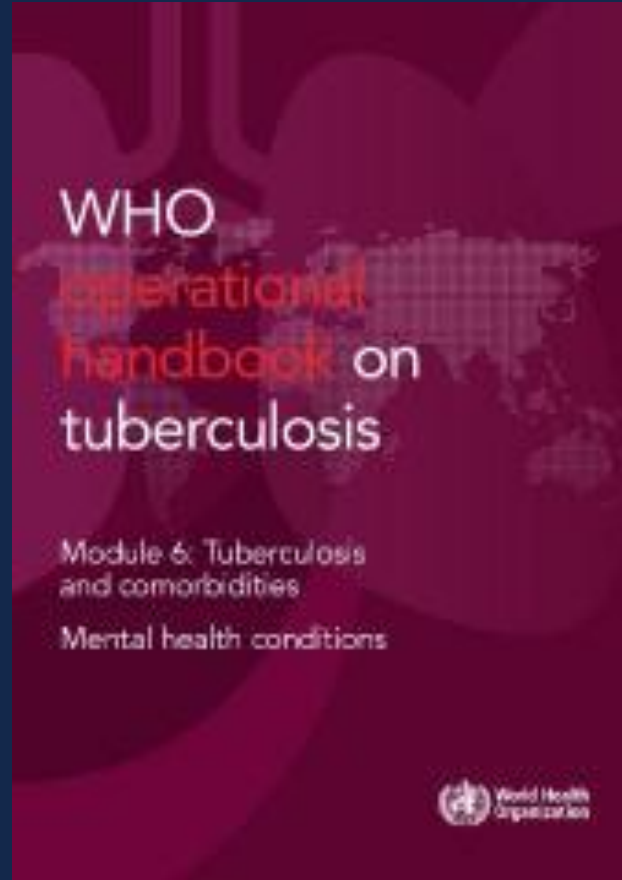
“...The heart of the problem is this: We learn best when we feel connected to others and nurtured as an individual”

--Peter Senge, 2006

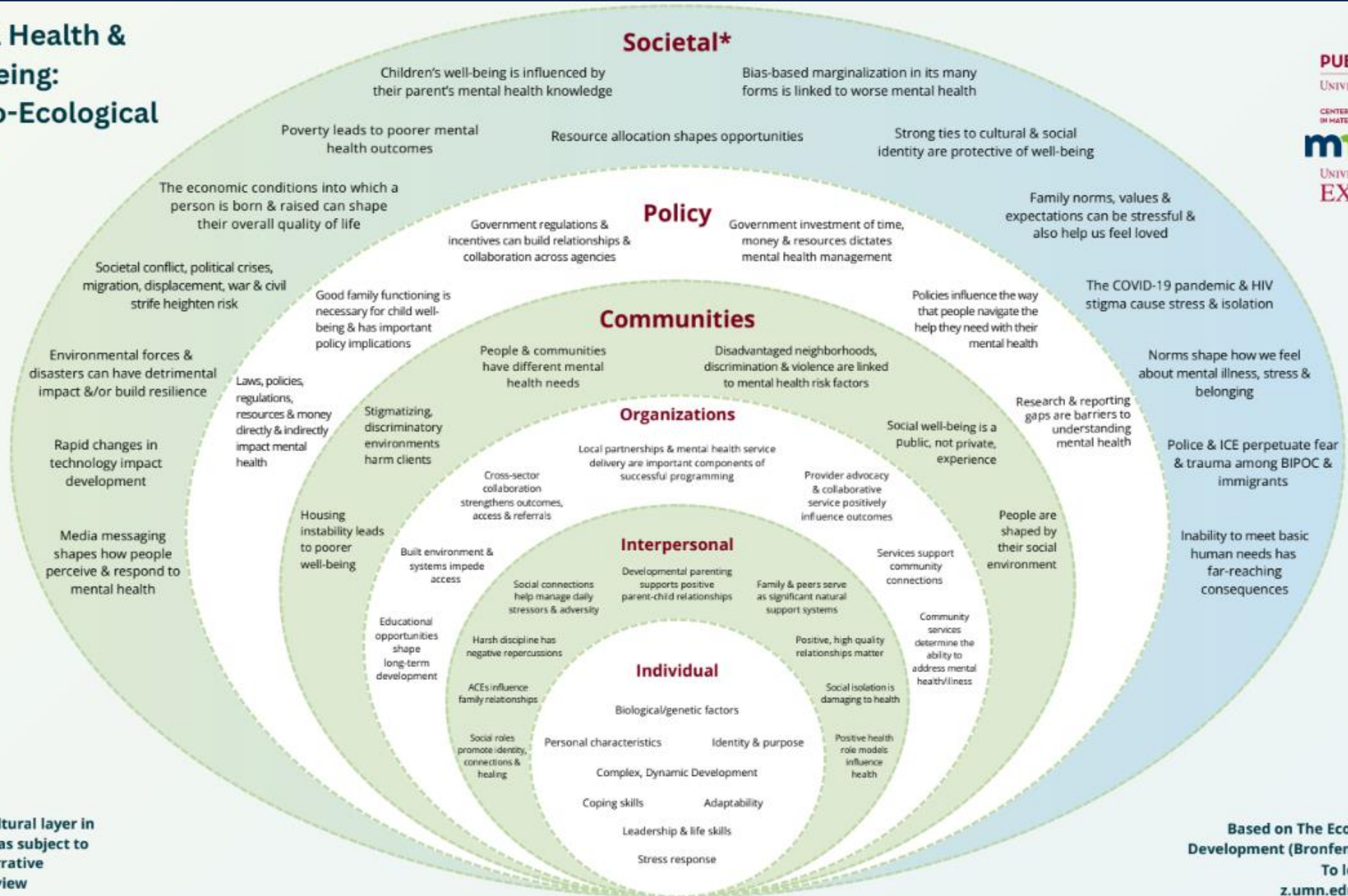


Paulina Siniatkina (1989-), *Don't speak!* Tempera on canvas (2016)

Syndemic of Mental Health Concerns and TB



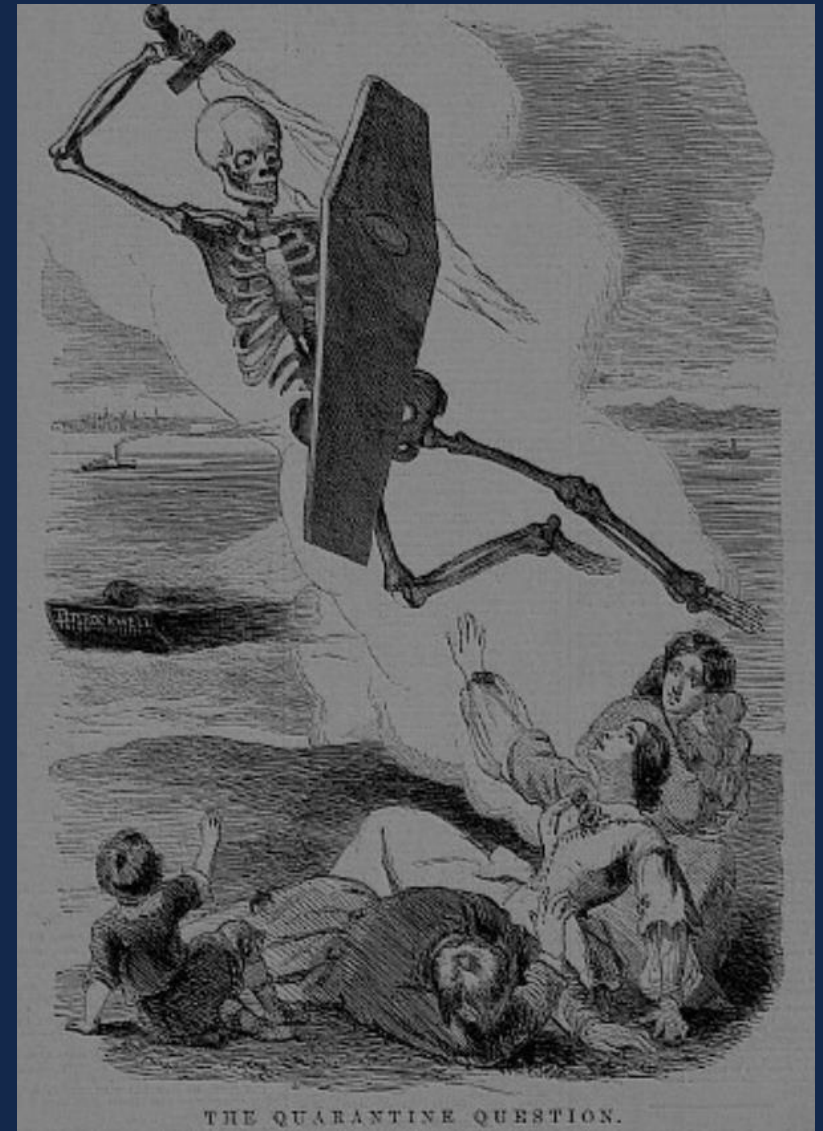
Mental Health & Well-being: A Socio-Ecological Model



*The sociocultural layer in this model was subject to a scoping narrative literature review

History of Isolation/Quarantine

- AD 549 Emperor Justinian enacts law to isolate people arriving from areas where Bubonic plague spreading.
- 600s China with well-established policy to detain plague-stricken sailors and foreign travelers arriving in Chinese ports.
- 1179 Third Lateran Council decrees living arrangements for lepers and how their separation from society is necessary.
- 1348 Venice creates governmental authority of a council to detain and isolate ships for up to 40 days. Latin for “40” *quadraginta*



Harper's Weekly quotes a Dr. Anderson as saying: "While the Angel of Death rides on the fumes of the iron scow, and infected airs are wafted to our shores from the anchorage, we shall have no security against these annual visitations of pestilence."



- 1403 Venice establishes first maritime quarantine station, or lazaretto (derived from *lazzari* which means lepers)
- 1647 Boston creates ordinance requiring all arriving ships to pause at harbor or risk \$100 fine.
- 1663 Due to plague epidemic English monarchy issues royal decree establishing permanent quarantines on all London-bound ships at mouth of Thames for 40-80 days.
- 1738 NYC City Council sets up quarantine anchorage off Bedloe's Island.
- 1799 Philadelphia builds expansive quarantine station called the Lazaretto on Delaware River.

- 1863 NY state creates Quarantine Act giving powers to health officer to detain any ship for any required length and to require fumigation.
- 1879 US Congress establishes Board of Health to assume quarantine responsibility if states' actions ineffective. Dissolved due to lack of funding.
- 1893 National Quarantine Act creates national system quarantine, codifying standards for inspections of immigrants and cargo ships.
- 1944 Public Health Service Act establishes quarantine authority of federal govt, which runs quarantine stations.
- 1949 Seattle creates locked ward for those with TB who refused treatment.



"The kind of 'assisted emigrant' we can not afford to admit." So reads the caption to this 1883 Puck drawing, which shows members of the New York Board of Health wielding a bottle of carbolic acid, a disinfectant, in their attempts to keep cholera at bay.

Ensuring Rights while Protecting Health

- 1900 Case of Chick Gin---Chinese business person who died of bubonic plague in San Francisco, leading to quarantine of over 25,000 Chinese residents and business closure. Lifted by court stating health officials acted with “evil eye and an unequal hand”
- 1907 Case of Mary Mallon ‘Typhoid Mary’ isolated for total of 26 years until her death at Riverside Hospital on North Brother Island.
- 1916 During epidemic of poliomyelitis in NY, children forcibly separated from parents. Those able to afford a separate room and medical care able to retain children at home.
- 1917-1919 More than 30,000 prostitutes incarcerated to limit spread of sexual transmitted diseases.
- 1990s NYC detains more than 200 persons who refused voluntary treatment of MDR TB for 6months.

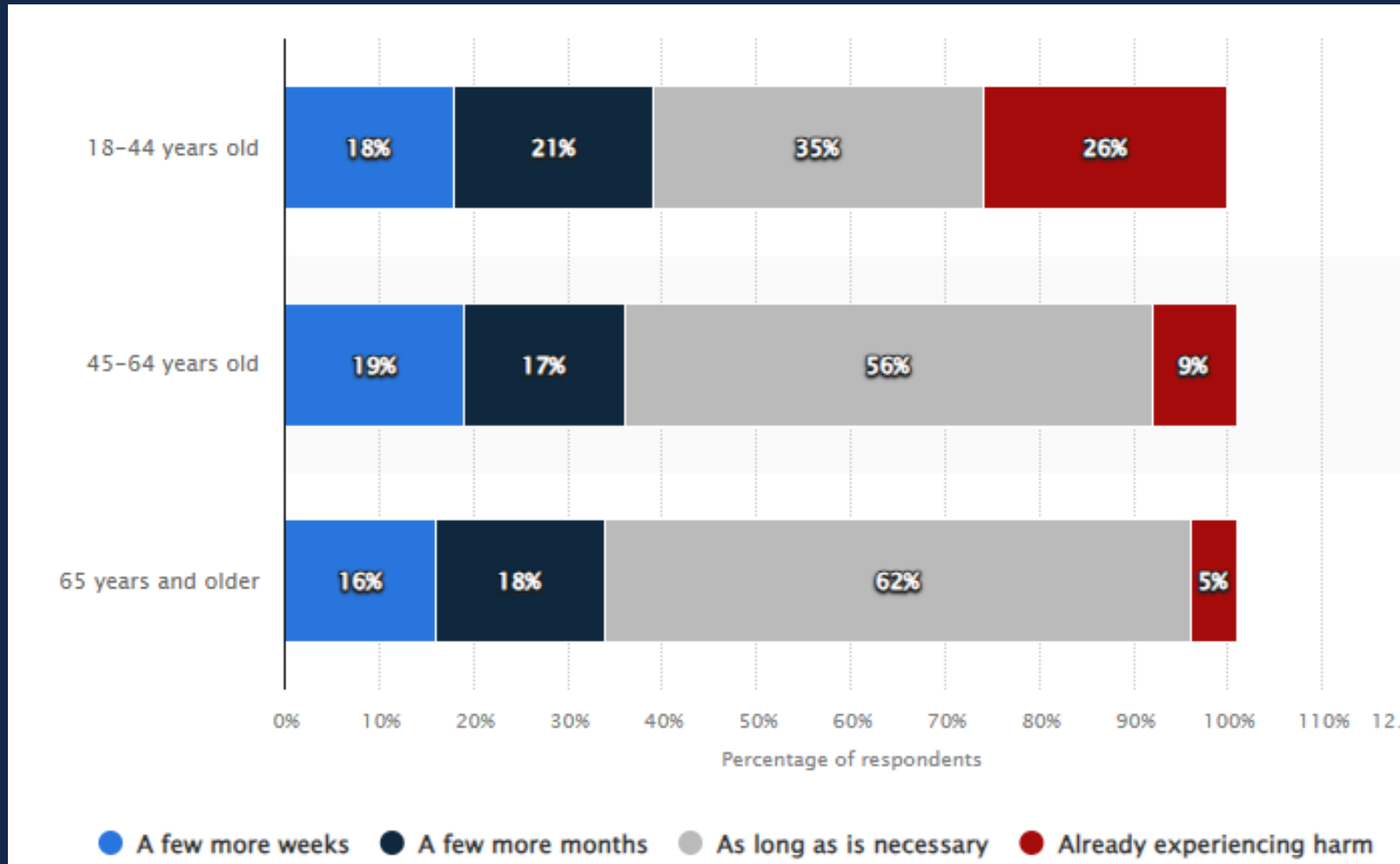


As this photograph from about 1930 shows, anyone arriving at the Immigration Station on New York's Ellis Island who appeared to have a communicable disease was immediately segregated. If diagnosis confirmed the suspicion, that person was quarantined in a hospital until he or she was no longer contagious.

Courtesy of National Library of Medicine

Percentage of U.S. adults able to follow social distancing for select time periods before their mental health suffers as of April 2020, by age

N=7931



Mental Health and Quarantine

- Covid re-focused examination on quarantine → Demonstrated increased anxiety/depression, trauma sx
- Increased exhaustion
- Low mood/sadness
- Anxiety in caring for patients
- Sense of detachment
- Irritability
- Insomnia
- Poor concentration
- Challenges engaging in work and increased avoidance behaviors (including substance abuse)
- While acute mental health symptoms decrease over time, still increased risk for chronic symptoms years later



Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395:912–20.

Hossain MM, Sultana A, Purohit N. Mental health outcomes of quarantine and isolation for infection prevention: a systematic umbrella review of the global evidence. *Epidemiol Health*. 2020;42:e2020038. doi: 10.4178/epih.e2020038. Epub 2020 Jun 2. PMID: 32512661; PMCID: PMC7644933.

Factors Affecting Response to Quarantine

- Duration
- Fears of Infection
- Frustration/Boredom
- Inadequate Basic Supplies
- Inadequate Information
- Financial Impact
- Stigma



**National Tuberculosis Coalition of America (NTCA)
Guidelines for Respiratory Isolation and Restrictions to
Reduce Transmission of Pulmonary Tuberculosis in
Community Settings**

“A community-based TB isolation policy is needed because TB is an airborne infection capable of spreading through communities, and an isolation policy has the potential to reduce or stop the spread of TB. However, current practices may prioritize public health safety to an extent that is detrimental to individual well-being, liberty and social justice. Current practices may be inconsistent and varied, which is detrimental to social justice and procedural legitimacy; and current practices may not reflect all available scientific data.”

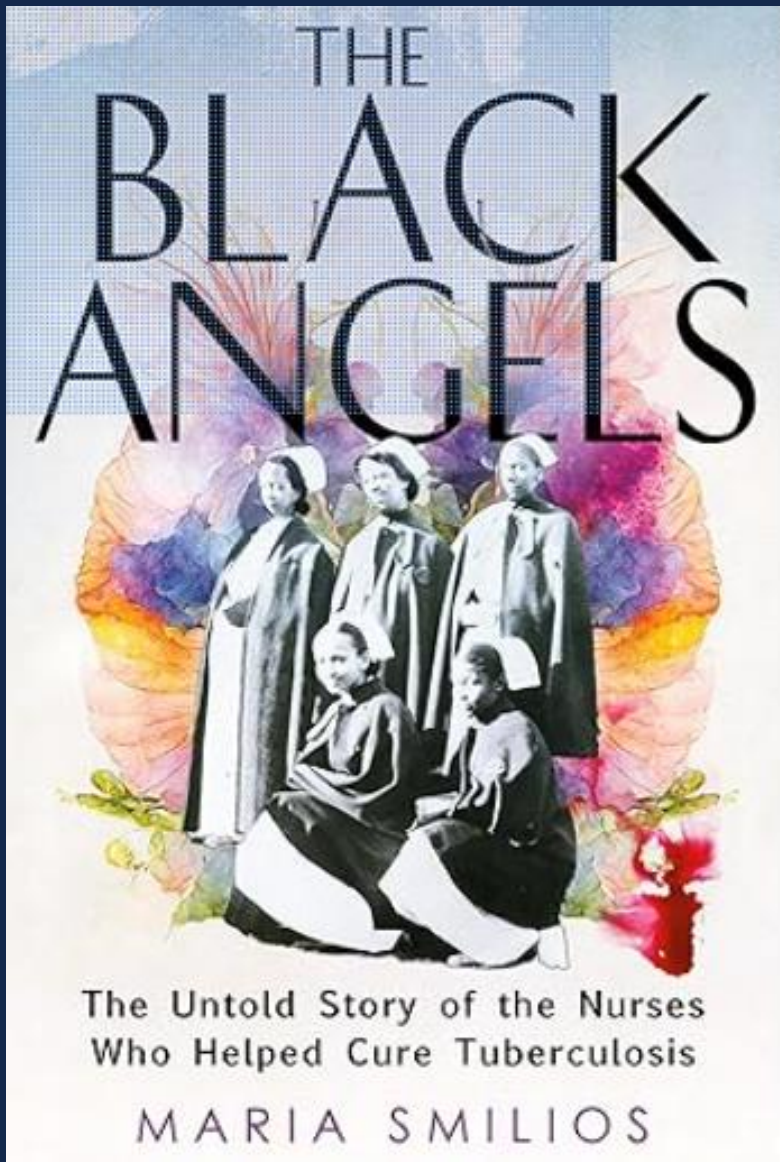
*Within these walls I am secure
from joy,—yes...But from pain
also. — Ruth Reed reflections from
sanitorium*





“These aren’t just questions about disease, they’re also questions about social responsibility and citizenship and protecting your local community.”

–Graham Mooney, Johns Hopkins SPH



Edna Sutton, Missouri Louvinia Meadows-Walker,
Clemmie Phillips, Phyllis Alfreda Hall Lambert, Marjorie
Tucker Reed, Kate Gillespie, Virginia Allen



COMMUNITY
IS ABOUT DOING SOMETHING
TOGETHER
THAT MAKES BELONGING
MATTER.
— Brian Solis

Surgeon General's 2023 Report Recommendations

- Strengthen Social Infrastructure
- Enact Pro-Connection Public Policies
- Mobilize the Health Sector
- Reform Digital Environments
- Deepen our Knowledge of Social Disconnection
- Cultivate a Culture of Connection

Thank you!

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