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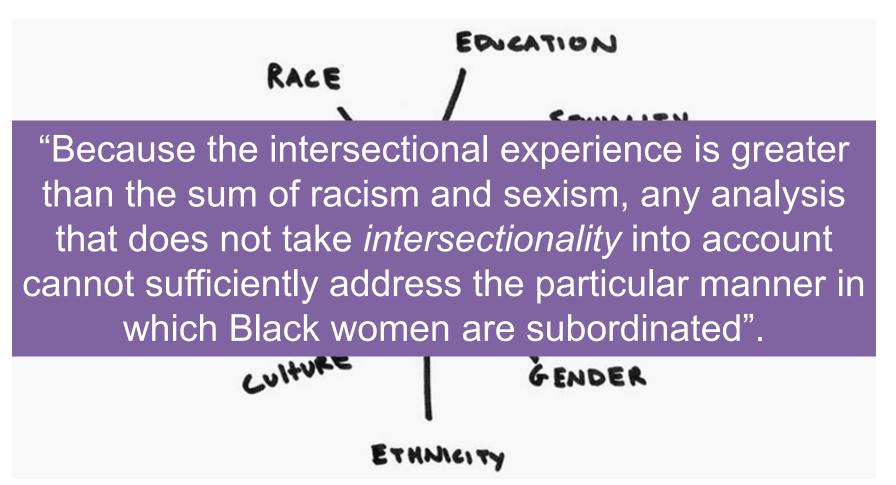
Feinberg School of Medicine

# Social and Environmental Context as a Risk Factor for Mental Health Conditions Among Black Women and Considerations for Treatment

Essential Healthcare Services Related to Anxiety and Mood Disorders in Women: A Workshop National Academies of Sciences, Engineering and Medicine April 29-30, 20224

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# Intersectionality is understanding the ways that multiple forms of inequality or disadvantage compound themselves

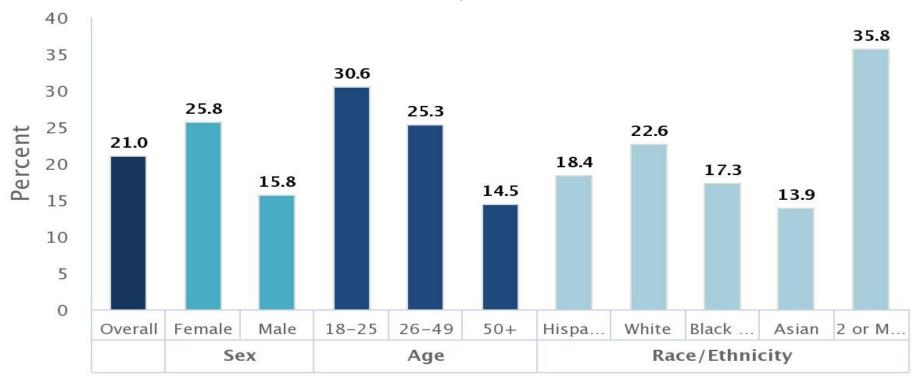


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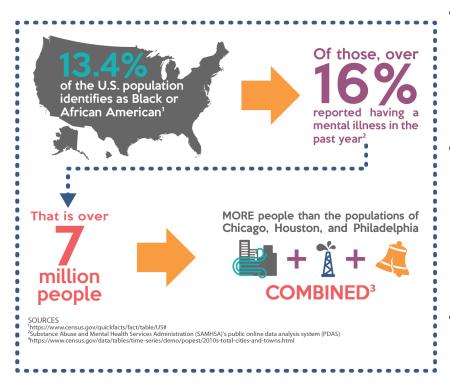
## Racial Disparities in the Prevalence of Mental Illness

Past Year Prevalence of Any Mental Illness Among U.S. Adults (2020)

Data Courtesy of SAMHSA



### Prevalence of Mental Illness Among Black Women



### McKnight-Eily et al (2009)

- Phone survey
- 14.9% Lifetime Depression DX by a health provider

### Lacey et al (2015)

- National Survey of American Life (NSAL)
- MDD Lifetime 14.6%
- Anxiety Lifetime 5.5%
- PTSD Lifetime 12.0%

### Jones et al (2020)

- National Survey of American Life (NSAL)
- MDD 14.4% Lifetime; 8.2% Past-year
- GAD 5.6% Lifetime; 3.2% Past-year
- PTSD 12.2% Lifetime; 4.9% Past year

## Social Determinants of Health are Risk Factors for Mental Illness

### **Neighborhood environment:**

Zip code, housing, safety

### **Socio-economic position:**

- Unemployment
- Lower average income
- Below federal poverty level

### **Education:**

Less than HS education

### **Community and social context:**

- Racism/discrimination
- Stress
- Trauma

### **Health care system:**

- Uninsured
- Lack of available providers



# Social Determinants of Health as Risk Factors for Mental Illness Among **Black Women**

### **Neighborhood environment:**

- Impoverished neighborhoods
- Housing instability
  - Eviction, IPV

### Socio-economic position:

- 7.7% BW vs 4.4% WW unemployed
- BW income -36% WM, -12% WW
- 17% BW vs 8% WW below FPL

#### **Education:**

• 36% BW vs 51% WW college degree

### **Community and social context:**

- Racism/discrimination/microaggressions
- Stress (employment, poverty, safety, 80% sole earner, 2/3 single parent, caregiving)
- Higher rates of child abuse, cumulative trauma exposure and PTSD

### **Health care system:**

12% BW vs 7% WW uninsured



# Community and Social Context Associated with Trauma Exposure among **Black Women**

- 8/10 BW trauma exposed
- 40% BW vs 30% WW IPV
- 1/8 BW Lifetime PTSD
- Rates highest 18-34, 35-49 years old
- Associated with unemployment,
   divorce, poverty, stress, discrimination
- · Chronic, severe, untreated
- Associated with MDD, SUD, diabetes, cardiovascular disease, maternal morbidity and mortality, birth outcomes



The New Hork Times

'What's Going on With Our Black Girls?' Experts Warn of Rising Suicide Rates.

Researchers have uncovered worrisome trends among Black youth.





## Black Girls and Suicide Risk

- 2003-2017 Suicide rate for girls increased with an APC of 6.6% (Sheftall et al 2022)
- 2013-2019 suicide rate increased by 59% for Black female youth 15-24 (Ramchand et al 2021)

### Black Women and Suicide Risk

- Risk, Akinyemi et al, 2023
  - Inpatient hospitalizations due to selfinflicted injury or suicide 2003-2015
  - 31-45 years old
  - Black women in highest income strata
  - Intimate partner violence
  - Uninsured
- Rates, Joseph et al, 2023
  - Rose among Black women from 1999 to 2020
  - West region
  - Ages 24-34
  - Intimate partner violence, neighborhood violence, access to resources



Black women experience higher levels of allostatic stress over a lifetime

Mean lifetime allostatic load score of women, by race

	Mean allostatic load scores		Percentage with scores of 4 or greater	
Age	White women	Black women	White women	Black women
18–24 years	1.15	1.75	5.13	8.80
25–34 years	1.86	2.34	16.37	24.16
35–44 years	2.36	3.00	23.12	40.28
45–54 years	3.36	4.34	42.01	61.81
66–64 years	4.29	4.99	63.59	82.68

Note: 4 is considered a high allostatic load score.

Source: Arline T. Geronimous and others, "Weathering' and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States," American Journal of Public Health 96 (5) (2006): 826–833, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470581/.



# The Weathering Hypothesis

Arline Geronimus, Sc.D

- Black adults experience early health deterioration as a result of repeated exposure to social and economic adversity
- "Weathering" measured using 10 biomarkers related to stress (blood pressure, cholesterol, BMI)
- Black women most likely to have a "high" weathering score
- By age 45, 50% of Black women had a high weathering score
- High scores not fully accounted for by poverty





### Disparities in Mental Health Service Utilization

Mental Health Services Received in Past Year Among U.S.
Adults with
Any Mental Illness (2020)

Data Courtesy of SAMHSA

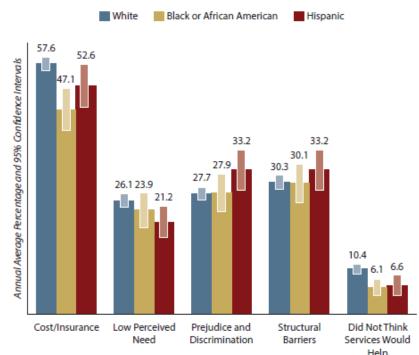
# Black women are 50% less likely to receive mental health treatment than White women



## Negative attitudes and beliefs about mental health treatment

- Do not perceive a mental health problem or a need for treatment
- Believe the problem will get better on its own
- Want to solve the problem on one's own
- Believe that mental health treatment will not be effective
- Shame/embarrassment
- Fear of being identified as "crazy" or "weak"
- Medication is addictive
- Concern about side effects
- Fear of judgment/feeling misunderstood
- Mistrust of the mental health system, privacy

FIGURE 4.7 Reasons for Not Using Mental Health Services among Adults with Any Mental Illness Who Had an Unmet Need for Services in the Past Year, by Race/Ethnicity, 2008-2012<sup>29</sup>



Black adults have more negative attitudes and stigmatizing beliefs about mental illness and treatment, experience more shame and self-blame associated with treatment seeking and higher levels of medical mistrust

# Closing the mental health treatment disparity gap

### Given that:

- Black women are at increased risk for depression, traumatic stress,
- Less likely to participate in conventional mental health services,
- More likely to go to primary care,
- A mindfulness-based intervention provided within a community health center setting may be more accessible and acceptable than conventional mental health treatment.



### Mindfulness Based Interventions

- Mindfulness based interventions improve physical and mental health
- The U.S. Department of Health and Human Services Agency for Healthcare and Research Quality recommends mindfulness-based interventions in their guidelines for non-pharmaceutical management of depression
- Reduce symptoms of mental illness (depression, anxiety), improve general health, daily functioning, interpersonal relationships, quality of life
- Decrease blood pressure, HRV, inflammatory response, immune response

## Culturally Tailored Interventions for Black Women

 Cultural adaptations of empirically supported treatments have shown enhanced efficacy among racial/ethnic minority populations

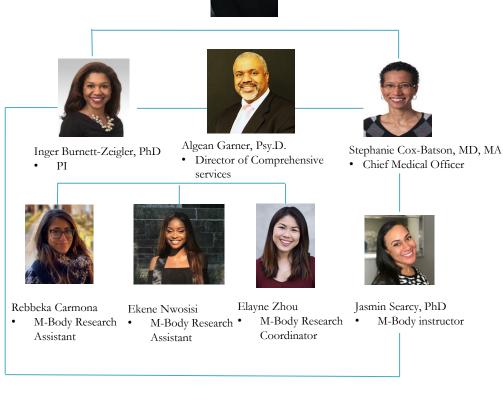
Author	Intervention	Target	Format	Outcomes
Bryant-Davis (2024)	Resist and Rise	Trauma, depression	Group, 5 sessions	Conceptual
Burnett-Zeigler (2016)	M-Body	Depression	Group, 8 sessions	Stress, depression, trauma
Jones, H. (2022)	B-SWELL	Stress, Life Simple 7 behaviors	Group, 8 sessions	feasible
Jones, L. (2016)	Claiming your connections	Stress, psycho - social competence	Group, 10 sessions	Perceived stress, external LOC
Neal-Barnett, A. (2011)	Sister Circles	Anxiety	Group, 5 sessions	Conceptual
Vroegindewey, A. (2022)	BSHAPE	Physical safety (in context of IPV)	Digital	Positive appraisals and coping

# Collaboration with Federally Qualified Health Center Network

Bernice Mills-Thomas, RN, MSM, MPH, MBA

Chief Executive Officer of Near North Health







### **FQHC Characteristics**

#### Fiscal Year 2019 Statistics:

- Served 37,223 clinical and non-clinical patients
- Had a total of 122,277 visits
- 64% of patients live at or below 100% of the Federal Poverty Index; 82% live below 200%
- Distribution of patients by race and gender:

0	African American	70%
0	Hispanic	23%
0	Caucasian	3%
0	Asian	2%
0	Other	2%
0	Females patients	59%
0	Male patients	41%

### Near North Health Centers:

- Cottage View
- Denny Community
- Komed Holman\*
- Louise Landau
- North Kostner
- Reavis School
- Sunnyside
- Winfield Moody\*
- Chicago Nutrition and Education Center
- Humboldt Park





### **Instructor Training**

### Foundational training –

- 8-week, 2.5 hour per week MBSR course in the community with an experienced teacher
- Develop a daily personal mindfulness practice

### Basic teacher training -

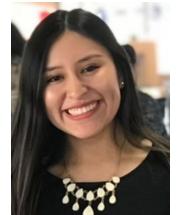
 1-day professional training workshop led by the PI and a mindfulness instructor

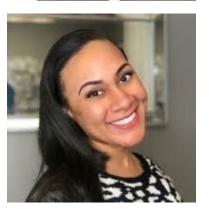
Weekly 1-hour supervision w/PI

= 28 hours of training

5 teachers trained during RCT BA, MSW, PhD, LCP











## eMBody (M-Body) Wellness



	Standard MBSR	FQHC adaptations
Form	Orientation, 8 weeks, 2.5 hours/week, ½ day retreat	8 weeks, 90 min/week
Content	1. Simple Awareness; introduction to yoga and body scan	No Change
	2. Attention and perception; introduction to yoga	
	3. Dealing with thoughts; noticing pleasant events	
	4. Stress; identifying triggers and reactions; noticing unpleasant events	
	5. Difficulty emotions and sensations; responding vs. reacting	
	6. Mindfulness & communication	
	7. Mindfulness & compassion	
	8. Developing a personal mindfulness practice	
Instructor	Attend MBSR program; Teacher training; personal mindfulness practice; professional training and related graduate degree; embodiment of mindfulness	FQHC paraprofessional (MA level), condensed teacher training
Intention	To be "relevant, and accessible enough to benefit potentially anybody who might be overwhelmed by suffering"	No Change

### Conceptual Model



### M-BODY







- Depression
- Anxiety
- Trauma
- Anger

### Social/ environmental stressors

- Microaggressions
- Spirituality

# Mechanisms

- CRP, IL6, IL8, BP
- Self-reported stress
- Mindfulness
- Reflection/rumination
- Cognitive regulation
- Emotion regulation
- Self-compassion

# Characteristics ndividual

# Participant recruitment





Near North Health Service Corporation @NearNorth\_HSC · Apr 6 @NorthwesternU and #NearNorthHealth are partnering to conduct a research study to understand how mind and body approaches may help

improve stress. Join and receive up to \$110 in compensation! For more

- EHR past 6-month depression sxs
- Phone
- Text
- Email
- Staff referral
- Flyers/brochures
- Social media
- Word of mouth
- Community businesses

	N
Screened	455
Eligible	375
Enrolled	245
Completed	184

### Participant Characteristics

Participant Demographics	
Female	100%
Black	76.3%
Unemployed	34.3%
Unpartnered	82.4%
Some college, no degree	34%
<\$19,999	46.1

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### Lessons Learned

- Shared priorities
- Active engagement with health center
- Open communication with participants, staff and leadership
- Quarterly stakeholder meetings
- **Newsletters**
- Participation in health center and community events
- Participant and health center incentives
- Collaboration on products

WINTER 2020 NEWSLETTER



#### WE'RE RECRUITING & M-BODY HAS GONE VIRTUAL!

Northwestern University and Near North Health Services are partnering to conduct a research study to understand how mind and body approaches such as breathing techniques, mindfulness meditation, and gentle yoga might work to improve stress.

#### M-Body Course Agenda

- Week 1: Awareness & Intro to Mindfulness
- Week 2: Attention & Perception
- Week 3: Dealing with thoughts
- Week 4: Stress: Causes & Physiological Responses Week 5: Dealing with difficult emotions and
- sensations: Responding vs. Reacting
- Week 6: Mindfulness & Communication
- Week 7: Mindfulness & Compassion Week 8: Developing a personal mindfulness

practice Meditation, body scan, and yoga are also included in weekly on-line sessions

#### We greatly appreciate your referrals and support.

If you are interested in being a part of our team or learning more, please do not hesitate to contact us at 773-683-1275. Thank you!

WOMEN REFERRED TO M-BODY WOMEN SCREENED TO PARTICIPATE

131 ENROLLED IN M-BODY NN INSTRUCTORS TRAINED

We would like to welcome M-Body's new research team with Elayne Zhou as the research coordinator and Rebbeka Carmona and Ekene Nwosisi as the research assistants! A warm thank you to Dr. Searcy for teaching two classes in a row!





Dr. Inger Burnett-Zeigle









#### **ELIGIBILITY**

- Female 18-65 uears old
- · English-speaking
- · PHQ-9 score of 5 and above OR has a diagnosis of depression

management skills

#### REQUIREMENTS

- · Attend an 8-week on-line group · 90 minutes per session
- · Learn breathing techniques, relaxation techniques, gentle stretching, and other stress
- Complete surveys at baseline, 8-16-, and 24-weeks

#### INCENTIVES

- · Up to \$110 in compensation · Complementary skill manuals and
- other supplies











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