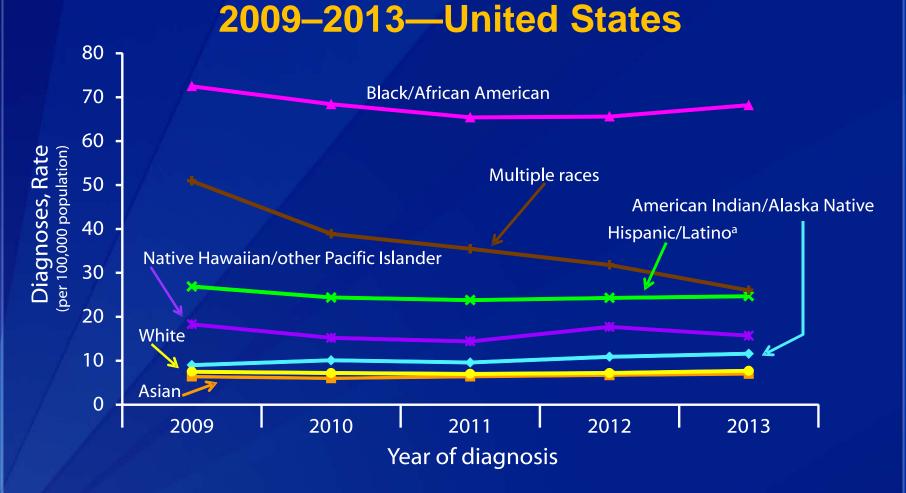
# Research on Discrimination and Health: Lessons for the Study of Disparities in HIV

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# Rates of Diagnoses of HIV Infection among Adults and Adolescents, by Race/Ethnicity



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

a Hispanics/Latinos can be of any race.



# HIV Infection in Blacks/African Americans United States and 6 Dependent Areas

Total 233,100 diagnoses of HIV infection in 2009–2013

- Blacks/African Americans: 46% of total
- Black/African American women: 63% of women
- Blacks/African Americans: 64% of infections attributed to heterosexual contact<sup>a</sup>
- Black/African American children: 67% of children aged <13 years</li>

In 2013, 45% of diagnoses of HIV infection among adults and adolescents were in blacks/African Americans.

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting.



<sup>&</sup>lt;sup>a</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

# HIV Infection in Hispanics/Latinos United States and 6 Dependent Areas

Total 233,100 diagnoses of HIV infection from 2009–2013

- Hispanics/Latinos: 22% of total
- Hispanic/Latino women: 17% of women
- Hispanics/Latinos: 18% of infections attributed to heterosexual contact<sup>a</sup>
- Hispanic/Latino children: 12% of children aged <13 years</li>

In 2013, 23% of diagnoses of HIV infection among adults and adolescents were in Hispanics/Latinos.

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting



a Hispanics/Latinos can be of any race.

b Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

# A Driver of Early Interest in Racism and Health

Racial/ethnic Disparities Persist

Earlier onset of Disease

Greater severity of Disease

Residual Racial Differences at every SES level

## Why Does Race Still Matter?

Could racism be a critical missing piece of the puzzle to understand the patterning of racial disparities in health?

# Racism in Contemporary Society

Despite enormous progress on race, there are ubiquitous signs of the pervasiveness of racism in our culture

# Negative Racial Images so deeply embedded in our minds...

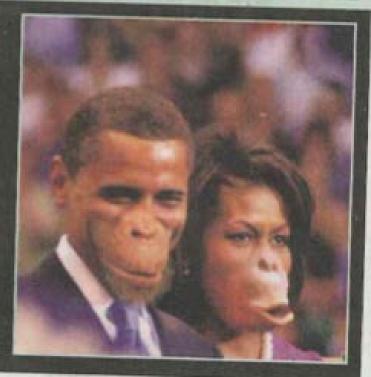
....they are very easily activated and shape our attitudes and behavior

#### OPINIE

Vladimir Poetin is president van Rusland. Hij stuurde deze bijdrage op ons verzoek, en verkoos 'wegens weinig tijd' beelden in plaats van tekst.







# OBAMA NIET NAAR PANDA'S

## De Morgen, March 2014

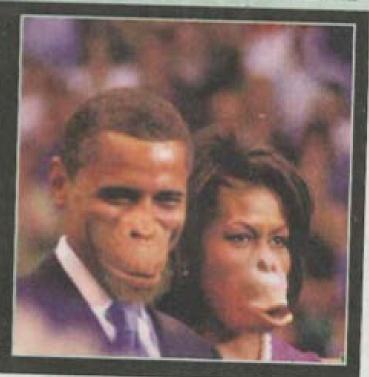
- A Belgian newspaper printed an image, just prior to Obama's visit to the Netherlands that week, showing the President and the First Lady as apes
- The article was reportedly a satirical piece that also joked about Obama selling marijuana. The newspaper packaged the photos as if they had been submitted by Russian president Vladimir Putin
- "Vladimir Putin is the president of Russia. He sent us this attachment at our request, and chose to send pictures instead of text 'because he doesn't have a lot of time',"
- De Morgen apologized for the image in its Monday edition, admitting it was guilty of "bad taste."

#### OPINIE

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# OBAMA NIET NAAR PANDA'S

### Racism in The Age of Twitter

- April 25, 2012, 7<sup>th</sup> game, 1<sup>st</sup> round of the 2012 Stanley Cup Playoffs
- Washington Capitals player Joel Ward scored a game-winning goal in overtime for a Washington Capitals win over the Boston Bruins.
- Joel Ward happens to be black (Born in Toronto of parents from Barbados)
- Hockey fans tweeted in response to their team's loss
- Racism was very close to the surface

### **Actual Tweets - I**

- WHY THE FUCK ARE YOU SHOWING REPLAYS OF THAT NIGGER SCORING
- We lost... To a hockey playing nigger... What kind of shit is this
- The Nigger scores again we riot
- Joel Ward your (sic) a nigger.
- Can't believe Boston just let a sand nigger beat them I cant believe the series winner was scored by a FUCKING NIGGER
- A nigger beat us in #OT Are you kidding me?
- Stupid nigger go play basketball hockey is a white sport

### **Actual Tweets - II**

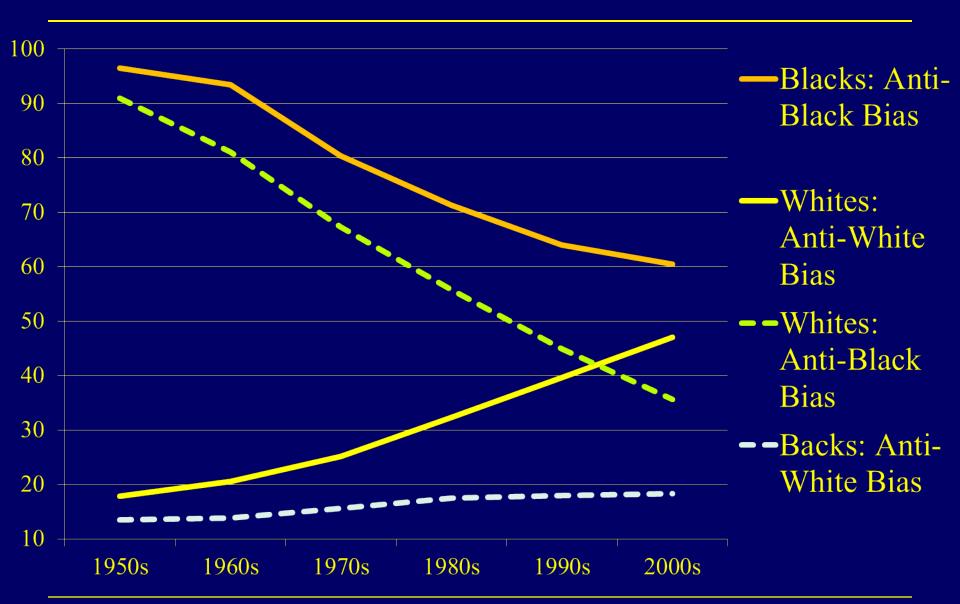
- Fucking stupid arrogant, smelly, useless, waste of life, sad excuse for NHL hockey player nigger
- Of course it's the fucking nigger. White power!
- bruins just got beat by a nigger I thought hockey was a white mans game
- The fact that a nigger scored the winner goal makes this loss hurt a lot more
- That nigger deserves to hang
- Nigger I hope you get hung
- Of all people to score it had to be the nigger
- The fact that a nigger got the goal made it ten times worse

### **Racism in America**

Issue	Blacks (%)	Whites (%)
Think Racism is a serious problem in the U.S.	84%	66%
Personally know someone who they believe is racist	43%	48%
Believe that they themselves have racial biases	12%	13%
Said they had been a victim of racial discrimination	51%	25%

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### Whites and Blacks Perceptions of Racial Bias



Norton and Sommers (2011) Perspectives on Psychological Science

### **Discrimination Persists**

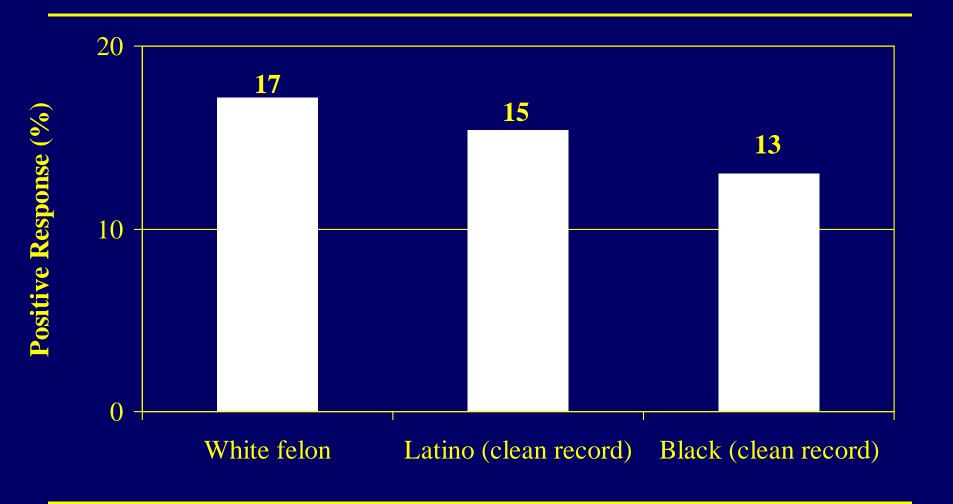
- Pairs of young, well-groomed, well-spoken college men with identical resumes apply for 350 advertised entry-level jobs in Milwaukee, Wisconsin. Two teams were black and two were white. In each team, one said that he had served an 18-month prison sentence for cocaine possession.
- The study found that it was easier for a white male with a felony conviction to get a job than a black male whose record was clean.

# Percent of Job Applicants Receiving a Callback

Criminal Record	White	Black
No	34%	14%

Yes 17% 5%

# Race, Criminal Record, and Entry-level Jobs in NY, 2004



#### Racism and Health: Mechanisms

- Institutional discrimination can restrict socioeconomic attainment and group differences in SES and health.
- Segregation can create pathogenic residential conditions.
- Discrimination can lead to reduced access to desirable goods and services.
- Internalized racism (acceptance of society's negative characterization) can adversely affect health.
- Racism can create conditions that increase exposure to traditional stressors (e.g. unemployment).
- Experiences of discrimination may be a neglected psychosocial stressor.

# Perceived Discrimination:

Experiences of discrimination may be a neglected psychosocial stressor

# **MLK Quote**

"..Discrimination is a hellhound that gnaws at Negroes in every waking moment of their lives declaring that the lie of their inferiority is accepted as the truth in the society dominating them."

Martin Luther King, Jr. [1967]

### Early Studies: Discrimination & Health

- Most studies were of mental health outcomes
- Other self-reported indicators of health widely used
- Most studies were cross-sectional
- Most studies focused on adults
- Most studies were U.S.-based
- Most focused on African Americans

# Challenges to Research on Perceived Discrimination and Health

### **Key Questions**

- Does it really make sense to talk about racism today?
- What is the contribution of shared response bias between measures of discrimination and self-report measures of health?
- Are mentally ill individuals (mis-)perceiving discrimination that does not even exist? That is, to what extent are reports of discrimination and health driven by selective recall as a function of current mental health?
- What are the key psychological confounding factors (such as social desirability, neuroticism, self-esteem) that could drive observed associations?

### **NSBA:** Temporal Ordering

- Study of 779 black adults in Wave 2 (1987-1988) and Wave 3 (1988-1989) of the National Study of Black Americans (NSBA)
- High psychological distress and depression at Wave 2 are unrelated to reports of discrimination at Wave 3 – indicating that poor mental health did not predict subsequent reports of discrimination
- Perceived racial discrimination at Wave 2 were associated with high levels of psychological distress, but not depression, at Wave 3

### NLSY Prospective Analyses

- Study of 3,450 whites, 1,851 blacks, 1170 Hispanics, and 1,387 other-race persons aged 14-21 in the NLSY between 1979 and 1983
- Employment-based racial discrimination predicts subsequent health-related work limitations
- Repeated reports of discrimination are strongly related to chronic limitations but single reports are not
- Work limitations did not predict subsequent reports of racial discrimination in seeking employment

# Prospective Analyses: Adolescents

- Study of 714 black adolescents, ages 10-12, at baseline
- Interviewed 3 times over 5 years
- Increases in discrimination associated with conduct problems and depressive symptoms
- Association between discrimination and conduct problems stronger for boys but no gender differences for depressive symptoms
- Association was weaker when youths received nurturant-involved parenting, had prosocial friends and performed well academically

# Prospective Analyses: Adults

- Study of 343 black women interviewed in 1996 and 2001 in Eastside Village Health Worker Partnership survey in Detroit, MI
- Changes over time in chronic discrimination was associated with an increase in symptoms of depression and a decline in self-reported health status
- Associations remain significant net of household income and education

### Recent Review

- 115 studies in PubMed between 2005 and 2007
- Some longitudinal data
- Attention to the severity and course of disease
- Many studies of Asians and a few studies of whites
- International studies:
  - -- national: New Zealand, Sweden, & South Africa
  - -- Australia, Canada, Denmark, the Netherlands, Norway, Spain, Bosnia, Croatia, Austria, Hong Kong, and the U.K.
- Association of discrimination with health robust after adjustment for psychological confounders

### Perceived Discrimination and Health

- Discrimination is associated with elevated risk of
  - -- diabetes risk (Hemoglobin A1c)
  - -- substance use (smoking, alcohol, other drugs)
  - -- breast cancer incidence
  - -- uterine myomas (fibroids)
  - -- subclinical carotid artery disease (IMT; intimamedia thickness
  - -- Delays in seeking treatment, lower adherence to treatment regimes, lower rates of follow-up
- Discrimination accounts, in part, for racial/ethnic disparities in health, in U.S., and elsewhere

### Discrimination and Disparities in Health

Perceptions of discrimination account for some of the racial/ethnic differences in:

- -- self-reported physical and/or mental health in the U.S. (Williams et al, 1997; Ren et al, 1999; Pole et al, 2005), Australia (Larson et al, 2007), South Africa (Williams et al. 2008) & New Zealand (Harris et al. 2006)
- -- birth outcomes (Mustillo et al. 2004)
- -- health care trust (Adegmembo et al, 2006)
- -- sleep quality and physical fatigue (Thomas et al. 2006)
- -- sleep quantity and quality (Slopen & Williams 2014)

#### Discrimination as Life Events: Major Experiences

- At any time in your life, have you ever been <u>unfairly</u> fired?
- For <u>unfair</u> reasons, have you ever not been hired for a job?
- Have you ever been <u>unfairly</u> denied a promotion?
- Have you ever been <u>unfairly</u> stopped, searched, questioned, physically threatened or abused by the police?
- Have you ever been <u>unfairly</u> discouraged by a teacher or advisor from continuing your education?
- Have you ever been <u>unfairly</u> prevented from moving into a neighborhood because the landlord or a realtor refused to sell or rent you a house or apartment?
- Have you ever moved into a neighborhood where neighbors made life difficult for you or your family?
- Have you ever been <u>unfairly</u> denied a bank loan?
- Have you ever received service from ... a plumber or car mechanic that was worse than what other people get?

# Major Experiences of Discrimination: Additional Questions

- What do you think was the <u>main</u> reason for this experience?
- When was the last time this happened?
- How many times has this happened during your lifetime?

### **Racial Micro-aggressions**

#### Consists of multiple components:

- Micro-assault: an explicit racial derogation characterized primarily by a verbal or nonverbal attack meant to hurt the intended victim through name-calling, avoidant behavior, or purposeful discriminatory actions.
- Micro-insult: characterized by communications that convey rudeness and insensitivity and demean a person's racial heritage or identity.
- Micro-invalidation: characterized by communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color.

### **Racial Microaggressions**



# Racial Battle Fatigue





"The result of constant physiological, psychological, cultural, and emotional coping with racial micro-aggressions in less-than-ideal and racially hostile or unsupportive environments"

#### **Chronic Stress: Every Day Discrimination**

In your day-to-day life how often do the following things happen to you?

- You are treated with less courtesy than other people.
- You are treated with less respect than other people.
- You receive poorer service than other people at restaurants or stores.
- People act as if they think you are not smart.
- People act as if they are afraid of you.
- People act as if they think you are dishonest.
- People act as if they're better than you are.
- You are called names or insulted.
- You are threatened or harassed.

What do you think was the main reason for these experiences

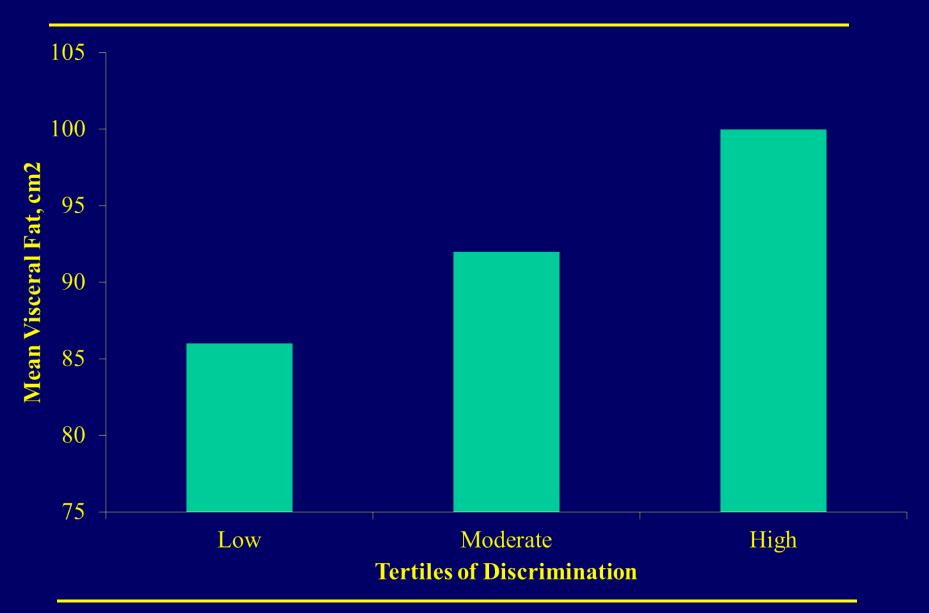
Detroit Area Study 1995; Williams et al. 1997



# Discrimination & Health: Tene Lewis

- Everyday Discrimination: positively associated with:
  - -- coronary artery calcification (Lewis et al., Psy Med, 2006)
  - -- C-reactive protein (Lewis et al., Brain Beh Immunity, 2010)
  - -- blood pressure (Lewis et al., J Gerontology: Bio Sci & Med Sci 2009)
  - -- lower birth weight (Earnshaw et al., Ann Beh Med, 2013)
  - -- cognitive impairment (Barnes et al., 2012)
  - -- poor sleep [object. & subject.] (Lewis et al, Hlth Psy, 2012)
  - -- mortality (Barnes et al., J Gerontology: Bio Sci & Med Sci, 2008).
  - -- visceral fat (Lewis et al., Am J Epidemiology, 2011)

## **Discrimination & Visceral Fat**



Lewis et al. 2011

#### Perceived Threat of Discrimination:

Discrimination, like other stressors, can affect health through both actual exposure and the threat of exposure

#### **Heightened Vigilance?**

Commenting on studies of ambulatory blood pressure measurement that showed that African Americans having higher blood pressure levels than whites while sleeping:

"The combination of living in physically dangerous urban areas and the maintenance of constant psychological vigil to deal with the mini-assaults of racial bias may lead some racial or ethnic minorities to live in a state of heightened vigilance that can adversely affect health.... blacks' perceived need to actively cope with the exigencies of their environment may lead them to unconsciously maintain a higher level of physiological arousal at night"

#### **Discrimination & Nocturnal Blood Pressure**

- African Americans are more likely than whites to manifest no blood pressure decline or a blunted blood pressure decline during sleep
- This pattern has been associated with increased risk for mortality and cardiovascular outcomes (Profant & Dimsdale, 1999).
- Recent studies reveal that exposure to discrimination contributes to the elevated levels of nocturnal blood pressure among blacks (Brondolo et al., 2008; Tomfohr et al., 2010).

#### Heightened Vigilance Scale

In dealing with the experiences that you just told me about, how often do you

- 1. Think in advance about the kind of problems that you are likely to experience?
- 2. Try to prepare for possible insults before leaving home?
- 3. Feel that you always have to be careful about your appearance (to get good service or avoid being harassed)?
- 4. Carefully watch what you say and how you say it?
- 5. Carefully observe what happens around you?
- 6. Try to avoid certain social situations and places?

# Heightened Vigilance and Depression

- Study of 718 adults in the Baltimore EHDIC Study
- Blacks have higher levels of vigilance than whites
- Vigilance predicts elevated risk of depression and contributes to the black-white disparity in depression
- Whites have higher levels of depressive symptoms than Blacks
- Adjusting for vigilance increased the racial disparity in depression
- That is, were it not for blacks' high vigilance, the well-documented black advantage in depression compared to whites, would be even larger

# "Every Shut Eye, Ain't Sleep"

- Study of 3,105 adults in Chicago (CCAHS Study)
- Blacks have higher levels of vigilance than whites
- Vigilance predicts elevated risk of sleep difficulties, independent of income and education
- Vigilance remains a predictor of sleep difficulty even after adjustment for discrimination and other stressors
- Blacks report higher levels of sleep difficulty than whites
- Disparity reduced when income & education added
- Disparity completely attenuated when adjusted for vigilance

# Heightened Vigilance and Hypertension

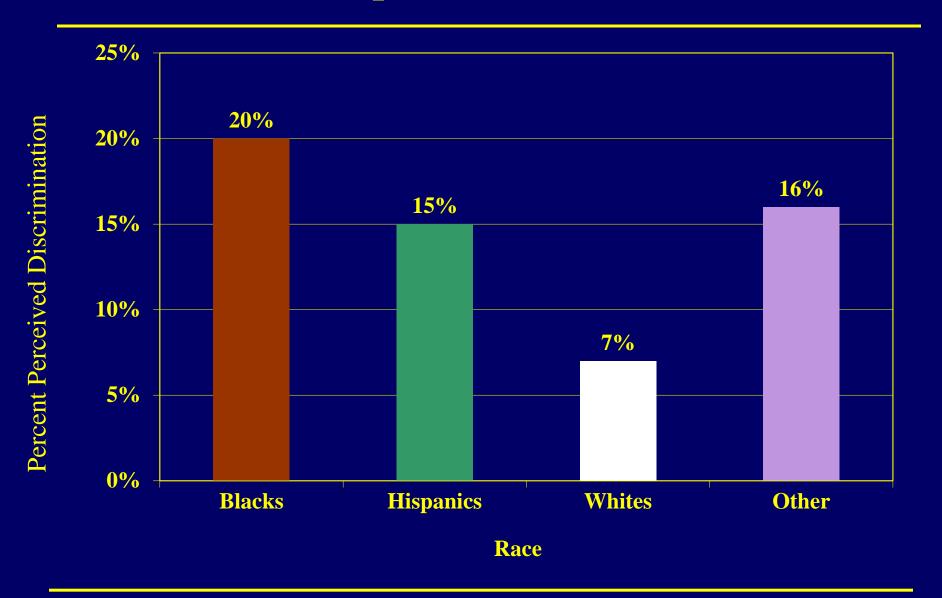
- Study of 3,105 adults in Chicago (CCAHS Study)
- Blacks have higher levels of vigilance than whites
- Vigilance associated with increased odds of hypertension for Blacks and Hispanics but not Whites
- Interaction between R/E and vigilance: at low levels of vigilance, racial disparities in hypertension are small. As vigilance increased, the racial/ethnic gap in hypertension widened for Blacks and Hispanics (marginally signif.)
- Vigilance remains predictive of hypertension when adjusted for hypertension risk factors & discrimination

# Needed Research Understanding Life Course Exposure

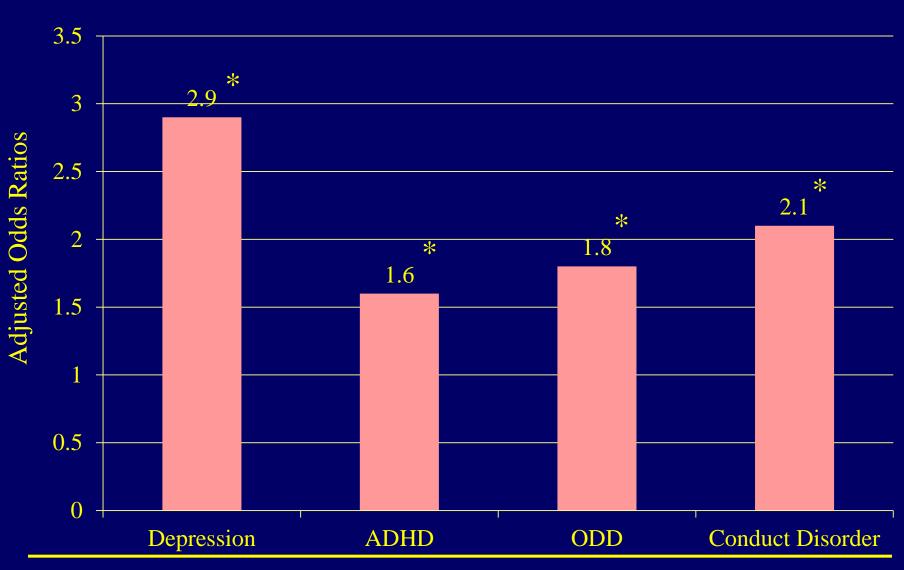
# It Starts Early

- Cross-sectional study of 5,147 fifth graders (10 11 years old ) from 3 US metropolitan areas
- Measure: a positive response to either "Have you ever been treated badly because of your race or ethnicity?" or "because of the color of your skin?"
- Mental Health: DSM-IV symptoms of 4
  disorders: depression, attention deficit
  hyperactivity disorder (ADHD), oppositional
  defiant disorder (ODD) and conduct disorder in
  prior 12 months

# Prevalence of perceived Discrimination



#### Discrimination and Mental Health Problems



#### **Discrimination and Child Health**

- Review of articles published through 2007 in Medline.
- 40 articles found among persons age 0 to 18
- Mental health: in 15 studies, 23 associations examined with self-reported discrimination all but one of the associations were significant with depressive symptoms, low self-esteem/self worth and anxiety
- Behavior problems/delinquent behaviors: In all cases of 11 associations examined, perceived discrimination was positively associated with internalizing and externalizing behaviors, anger, conduct problems, and delinquent behaviors in adolescents and preadolescents.

# Discrimination and Pregnancy Outcomes

- In six of 7 associations, discrimination is linked to adverse pregnancy outcomes. One found no association.
- For example, discrimination predicts having a very low birth weight child and preterm birth
- In one study, the association is strongest for black women with the highest level of education
- In one study, after adjusting for self reported racial discrimination, the black-white gap in preterm delivery and low-birth weight was reduced to non significance.

# Discrimination and Maternal Depression



- Study of Black mothers in Detroit found that low education, food insecurity, financial stress, poor housing and lack of child care were all associated with maternal depression.
- However, when everyday discrimination added to the model, none of the other risk factors remained significant

#### **Discrimination and Adolescent Substance Use**

- Discrimination linked to alcohol, tobacco, or drug use in Black and Native American Youth (all 7 tests)
- Anger due to racial discrimination positively associated with number of drinks per week in black youth (Terrell et al., 2006).
- Everyday discrimination associated with tobacco use in black girls aged 11 to 19 (Guthrie et al., 2002).
- Discrimination predicts drug and alcohol use in 9 to 16 years old Natives on tribal reservations (Whitbeck et al., 2001).
- Discrimination at ages 10 to 12 predicts drug use 5 years later in black adolescents (Gibbons et al., 2007)

#### **Parents to Child Transmission**

- Study of Black adolescents found that parental racial discrimination was associated with anxiety and depression in the child, independent of the child's experiences of racial discrimination (Gibbons et al., 2004).
- In this study of black adolescents, parental experiences of discrimination were associated with substance use in the children, mediated by both parental and child anxiety and depression (Gibbons et al., 2004).
- A study of 10 and 11 year olds found that mother reports of racial discrimination were associated with poor parental mental health which in turn adversely affected parenting behaviors and parenting satisfaction (Murry et al., 2001).

## Mounting Evidence: Children and Youth





- 121 studies (461 outcomes) among persons 0 -18 years old, through 2011.
- Mental health: discrimination predicts worse mental health (anxiety, depression) 76% (127) of associations
- Positive mental health: discrimination inversely associated (resilience, self-worth, self-esteem) in 62% (108) of associations

#### Discrimination and Children and Youth

- Behavior problems/delinquent behavior: discrimination positively associated (aggression, internalizing, externalizing and conduct problems) 69% (84) of tests
- Health behaviors: positive association (alcohol use, drug use, smoking) 51% (74) of tests
- Well-being, life satisfaction, quality of life: inverse association 45% (22) of tests; 50% unrelated.
- Negative pregnancy/birth outcomes: positive association in 79% (14) of tests

#### Needed Life Course Research

- At the present time, we do not clearly understand how the age of onset of experiences of discrimination and the accumulation of such experiences over the life course affect the onset and course of illness
- Gee and colleagues have recently outlined a comprehensive agenda for empirically assessing how racism can affect health using a life course lens
- They highlight the importance of attending to sensitive periods, the interdependence in exposures among persons, latency periods, stress proliferation processes and historical period and birth cohort

# Other Notable Findings

# How much does discrimination contribute to the declining health status of immigrants over time?

#### Acculturation Stressors and health

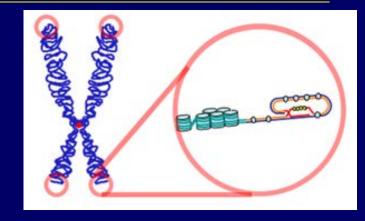
- A study of migrant Mexican workers in Fresno, CA
- Acculturation stress: stressors linked to discrimination, legal status and problems speaking English.
- Acculturation stressors:
  - inversely related to physical & mental health
  - partially accounted for declines in health with years in the U.S.
  - had a more severe negative effect on migrants who were more acculturated than those who were less acculturated.

#### Discrimination and Allostatic Load

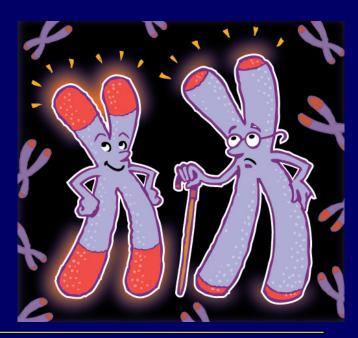
- 331 Blacks (20 year olds) from 9 rural counties in Georgia
- Discrimination assessed at age 16, 17, and 18 (9 SRE items)
- Allostatic load assessed at age 20; overnight cortisol, epinephrine, norepinephrine, SBP, DBP, CRP, BMI
- 79% of sample had low and increasing levels of discrimination; 22% had stably high levels
- Stably high levels of discrimination prospectively associated with high allostatic load
- Association increased when adjusted for CES-D, life stress, socioeconomic risk (family poverty, caregiver education and unemployment, family structure, welfare, financial stress) and unhealthy behavior (nutrition, exercise, alcohol, tobacco, binge drinking, and marijuana use).

# Discrimination and Telomere Length

 Telomeres are sequences of DNA at the end of chromosome that protect against DNA degradation



 Telomere length from leukocytes is viewed as a marker of systemic aging of the organism



## **Discrimination and Telomere Length**

- Study of 92 Black men age 30 to 50 years
- Prior research found that black have a faster rate of telomere shortening than Whites.
- Multiple psychological stressors have been linked to accelerated telomere shortening.
- This study found that racial discrimination was associated with shorter telomere length among blacks with implicit anti-black bias (internalized racism).

# We need to Measure Discrimination Comprehensively

#### Macro-Stressors

- Large-scale societal events such as natural disasters that can be stressful for individuals
- Major negative race-related events can also be macro-stressors
- Research has also found that historical trauma, traumatic events experienced by Native American communities in the past, can reach across generations and adversely affect the physical and mental health of contemporary Native Americans (Walters et al., 2011).

# Duke University Lacrosse Team Incident

- In 2006, a black woman accused white male members of Duke team of racial derogation, rape and violence
- Racially divisive media coverage & rhetoric followed
- Duke's black students were stressed and had concerns about their safety
- An experimental study at Duke found that, compared to students who participated in the experiment before the Lacrosse team incident, after media attention to the incident, black students, especially females, had higher levels of cortisol and were unresponsive to an experimental task
- <u>Understudied: health consequences of hostile environs</u> Richman & Jonassaint, Annals of Behavioral Med, 2008

#### Arab American Birth Outcomes

- Non race-related stressors can be racialized in ways that can generate racial/ethnic discrimination
- September 11 terorist attacks an example
- Well-documented increase in discrimination and harassment of Arab Americans after 9/11/2001
- Arab American women in California had an increased risk of low birthweight and preterm birth in the 6 months after Sept. 11 compared to pre-Sept. 11
- Other women in California had no change in birth outcome risk, pre-and post-September 11

#### Online Discrimination

- Study of 264 adolescents (14-18 year olds)
- 20% of whites, 29 % of blacks, 42% of multiracial other reported individual discrimination
- 71% of blacks and whites and 67% of multiracial/other witnessed vicarious discrimination
- Location of victimization: text messaging (35%), chat (13%), discussion forums (10%), online games (13%), social network sites (50%), and other (instant messenger, facebook, yahoo games (22%)
- 34% were victimized in more than one location
- Most common combination was text messaging and social network sites

#### Online Discrimination and Mental Health

After adjustment for age, gender, ethnicity, other adolescent stress, and offline discrimination,

- Online individual discrimination was positively related to depressive symptoms and anxiety symptoms
- Online vicarious discrimination was unrelated to mental health

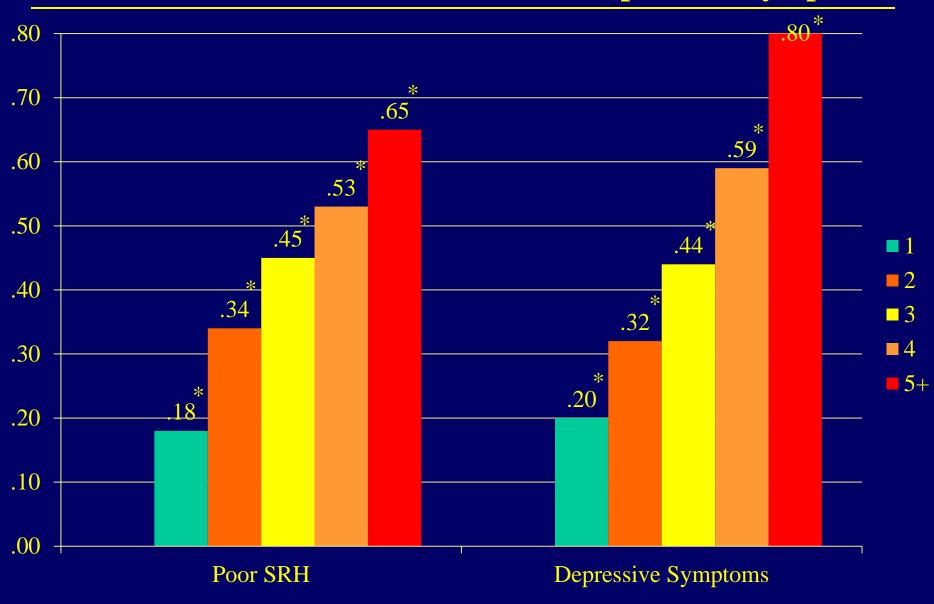
# Discrimination must be assessed and understood within the context of .....

....a broad range of psychosocial stressors that capture the social contexts and experiences of populations

# Comprehensive Measure of Stressors

- Based on prior research, we focus on 8 domains that reflect key arenas in which people operate (e.g., home, job, neighborhood) & major roles/statuses they assume
- 8 domains:
  - 1. Acute life events 5. Work Stressors
  - 2. Financial 6. Life discrimination
  - 3. Job discrimination 7. Relationship Stress
  - 4. Childhood adversity 8. Neighborhood stress
- Multiple indicators in each stress domain
- Correlations among stressors are low (range: -0.1 to .33)

#### **Stressors and Poor Self-Rated Health / Depressive Symptoms**

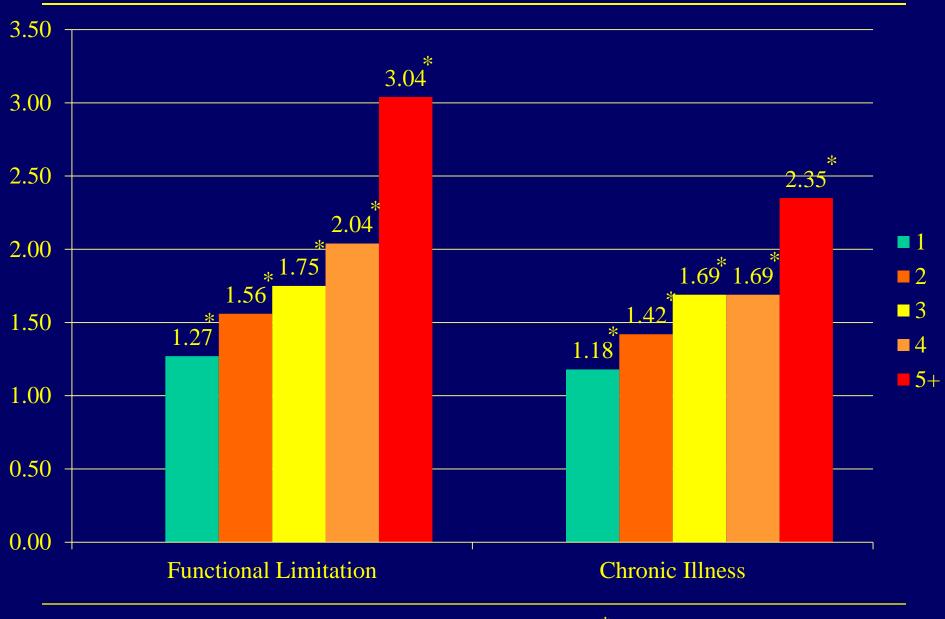


Sternthal, Slopen, & Williams Du Bois Review, 2011

\* p<0.05, + p<0.10,

none = omitted

#### **Stressors and Functional Limitations / Chronic Illness**



Sternthal, Slopen, & Williams Du Bois Review, 2011

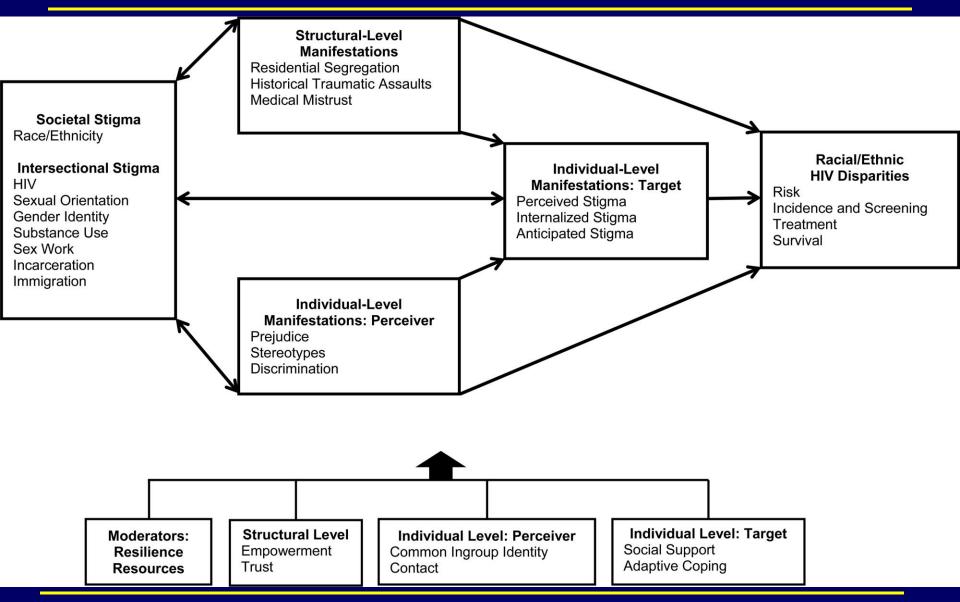
\* p < 0.05, + p < 0.10,

none = omitted

# Self-reported Discrimination must be assessed and understood within the context of .....

....all of the other mechanisms and pathways by which Racism affects health

# Stigma and HIV Disparity Model



# Lessons for Research on Racial Disparities in HIV

### **Multiple Stigmas: Intersectionality**

- Societal Stigma linked to race/ethnicity drives R/E disparities in risk, incidence & screening, treatment, and survival
- This occurs at both structural and individual levels
- There is interdependence among multiple, co-occurring de-valued social identities
- We must consider how multiple stigmas (R/E, HIV itself, sexual orientation, transgender identity or expression, illicit drug use, sex work, incarceration, immigration) interact with each other to affect R/E HIV disparities

#### **Implications of Intersectionality**

- 1<sup>st</sup>, people at risk of and living with HIV experience discrimination from multiple facets of their identity beyond their race/ethnicity
- 2<sup>nd</sup>, different combinations of these stigmatized identities can produce distinctive responses and experiences. E.g, some identities are more prototypical (e.g., HIV-positive, gay White men), and they may be the main target of social discrimination at the individual level more so than intersectional identities that are less prototypical (e.g., HIV-positive gay Native American men), which may be more socially "invisible."

#### **Implications of Intersectionality -2**

- 3<sup>rd</sup>, stigma is dynamic and the basis and nature of stigma can vary for the same person across contexts.
- For example, Black men living with HIV who have sex with men may be stigmatized in White communities due to their race, in Black communities (e.g., faith-based organizations) due to their sexual orientation, and in Black and gay communities due to their sero-status

#### **Multiple Reasons**

- Study of 2 waves of data from 1,944 adults in Miami
- Assessed the association between major experiences of discrimination and of MDD
- Compared to those reporting no discrimination:
- -- Those reporting one reason for discrimination are twice as likely to meet criteria for MDD
- -- Those reporting two or more reasons are six times as likely to meet criteria for MDD
- Compared to those reporting one reason:
- -- Those reporting multiple reasons are almost three times as likely to meet criteria for MDD

Adjusted for Chronic stressors: reduced but significant

#### Multiple Disadvantaged Statuses

- National MIDUS sample of 2,647 adults
- Persons who occupy multiple disadvantaged statuses are more likely to experience poor health (MDD, distress, worse physical health functional limitations)
- Multiply disadvantaged persons report more types of discrimination (age, gender, race, religion, weight, ability, appearance, sexual orientation)
- Multiply disadvantaged persons also report higher levels of discrimination, and view discrimination as more stressful
- Exposure to discrimination partially mediates the association between multiple stigmatization and health

# Resources and Resilience for Dealing with Discrimination

### **Buffering Effect: Social Support**

- 331 Blacks (20 year olds) from 9 rural counties in Georgia
- Discrimination assessed at age 16, 17, and 18 (9 SRE items)
- Allostatic load assessed at age 20; overnight cortisol, epinephrine, norepinephrine, SBP, DBP, CRP, BMI
- Social support: composite of 11 item caregiver emotional & instrumental support and 4 item measure of peer support.
- High social support ameliorated the negative effect of high discrimination on allostatic load.
- That is, among youth high on social support, support reduced the allostatic load of those high on discrimination to the levels of those that were low on discrimination

## **Buffering Effect of Religion & Optimism**

- Study of 414 rural low income Black mothers
- Racial discrimination and major life events positively associated with depressive symptoms.
- Church-based social support (21 item scale; supports from relationship with God; support from one's congregations; support from clergy) buffered the negative effect of discrimination on depressive symptoms.
- Optimism (LOT scale) also buffered the negative effect of discrimination on depression.

# Undoing Racism & Health

Limited evidence that policies and events that address the legacies of racism may have positive effects on physical and mental health

# Economic Policy is Health Policy

In the last 50 years, black-white differences in health have narrowed and widened with black-white differences in income

### **Economic Empowerment**

- Pilot study in MD showed that economic empowerment can alter HIV risks in a sample of illicit drug-using women who were involved in prostitution
- The intervention: 6 two-hour sessions that taught both HIV risk reduction and the making, marketing and selling of jewelry
- The intervention enabled the women to earn income from making and selling jewelry
- After 3 months, there were reductions in receiving drugs or money for sex, the median number of sex trade partners, the amount of money spent on drugs and daily crack use.

#### A Jesse Jackson Effect?

- A national panel study of U.S. Blacks from 1979 to 1992
- At the third Wave (1988):
  - -- reports of health problems, disability, and psychological distress were at their lowest levels over the 13-year period
  - -- the lowest proportion of blacks reporting that whites wanted to keep blacks down and the lowest reports of racial discrimination in the past month
- In 1988, Jesse Jackson, a black man, was running the most successful presidential campaign ever by a black person in U.S. history
- A spill-over effect from the political climate to health?

#### Nelson Mandela: Election Euphoria

- During apartheid, blacks report markedly lower levels of happiness & life satisfaction than whites in South African
- National data collected on well-being: '83, '88, '94, '95
- In 1994, black levels of happiness and life satisfaction at highest level between 1983 and 1995
- In 1994, percent of happy and satisfied blacks slightly higher than those of whites
- For the first time in history: all South Africans have the same level of happiness
- Among black South Africans, levels of psychological well-being revert to earlier levels 18 months later

#### Obama Effect on Health?

- Study of 46,000 Ohio adults, Aug 6, 2008 to Jan 24, 2009
- Period covers Obama's nomination (Aug. 29, 2008), election (Nov. 4, 2008), and inauguration (Jan. 21, 2009)
- Quasi-experimental "interrupted time-series" analysis adjusted for income, education, health insurance, age, sex, marital status, Dow Jones average, and unemployment rate
- Self-rated health was higher for blacks and Hispanics, after Obama's nomination for president
- Similar effect not evident after his election or inauguration
- No effect among whites

#### **President Obama: Reductions in Crime?**

- Criminologists noted a drop of 10% in the U.S. murder rate associated with President Obama's election in November 2008 that remained at that level for 6 months
- Decline evident across the U.S. but larger in metropolitan areas than non-metropolitan areas.
- Mechanism probably due to an increase in trust in government and public officials
- In past 50 years, black homicide rates highest 1971 1974 when black trust in government was at historic low point
- White homicide rate was highest in 1980 when white trust in government was historically low in the final year of Jimmy Carter's presidency

#### Perceived Discrimination: Overall Assessment

- Studies of discrimination and health continue to proliferate
- The consistency of an inverse association between discrimination, operationalized in various ways, and an increasingly broad range of health outcomes, across multiple population groups, in a wide range of national and cultural contexts, is impressive
- It lends credibility to the plausibility that discrimination is an important emerging risk factor for disease

#### Conclusions

- Racism, in its multiple forms, is rapidly emerging as a major risk factor for health
- Need for increased research attention to understand its potential effects
- Urgent need to identify:
  - -- effective efforts to mitigate its pathogenic effects
  - -- feasible and optimal strategies to create the political will and support to dismantle societal structures that support racism, ethno-centrism, anti-immigrant sentiments and incivility