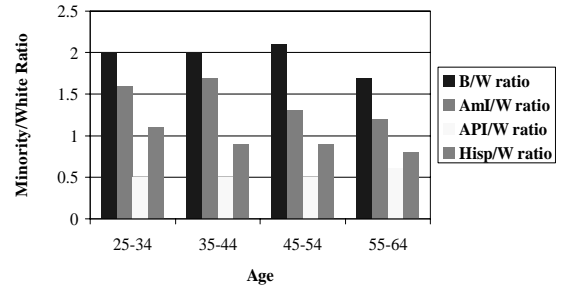


Racism and Health: Understanding Multiple Pathways

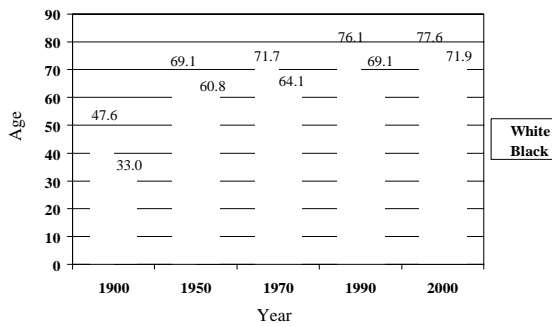
13th Annual Summer Public Health Research Videoconference on
Minority Health, June 25, 2007

David R. Williams, PhD, MPH
Florence & Laura Norman Professor of Public Health
Professor of African & African American Studies and
of Sociology
Harvard University

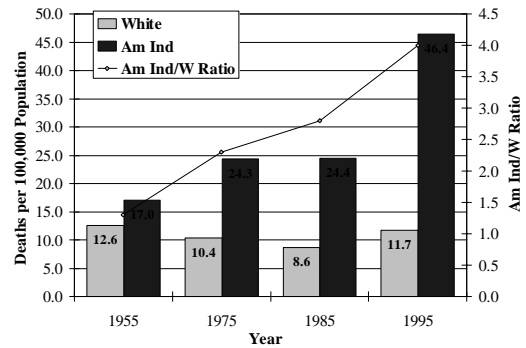
There Is a Racial Gap in Health in Mid Life: Minority/White Mortality Ratios, 2000



Life Expectancy at Birth, 1900-2000

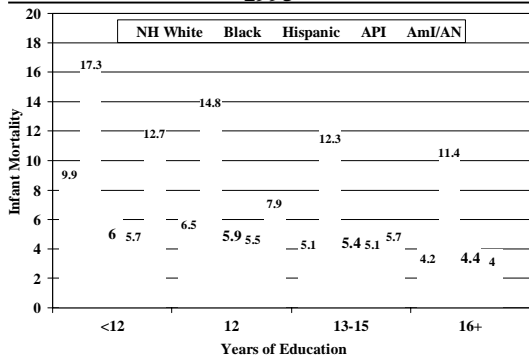


Diabetes Death Rates 1955-1995



Source: Indian Health Service; Trends in Indian Health 1998-99

Infant Mortality by Mother's Education, 1995



Racism and Health: Mechanisms - I

- 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.

Racism and Health: Mechanisms - II

- 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.
-

Understanding Elevated Health Risks

“Has anyone seen the SPIDER that is spinning this complex web of causation?”



Krieger, 1994

Racial Segregation Is ...

1. Myrdal (1944): ..."basic" to understanding racial inequality in America.
 2. Kenneth Clark (1965): ...key to understanding racial inequality.
 3. Kerner Commission (1968): ...the "linchpin" of U.S. race relations and the source of the large and growing racial inequality in SES.
-

Racial Segregation Is ... (continued)

4. John Cell (1982): ..."one of the most successful political ideologies" of the last century and "the dominant system of racial regulation and control" in the U.S.
 5. Massey and Denton (1993): ..."the key structural factor for the perpetuation of Black poverty in the U.S." and the "missing link" in efforts to understand urban poverty.
-

African American Segregation: History-I

- Segregation = the physical separation of the races by enforced residence in different areas.
 - It emerged most aggressively in the developing industrial urban centers of the South and, as Blacks migrated to the North, it ensured that whites were protected from residential proximity to blacks.
-

Sources: Cell, 1982; Lieberman, 1980; Massey & Denton, 1993.

African American Segregation: History-II

- In both northern and southern cities, levels of black-white segregation increased dramatically between 1860 and 1940 and have remained strikingly stable since then.
-

Sources: Cell, 1982; Lieberman, 1980; Massey & Denton, 1993.

African American Segregation: History-III

Segregation was

- imposed by legislation,
- supported by major economic institutions,
- enshrined in the housing policies of the federal government,
- enforced by the judicial system and vigilant neighborhood organizations,
- and legitimized by the ideology of white supremacy that was advocated by the church and other cultural institutions

Sources: Cell, 1982; Lieberman, 1980; Massey & Denton, 1993.

Segregation in the 2000 Census - I

- Dissimilarity index declined from .70 in 1990 to .66 in 2000
- Decline in segregation due to blacks moving to formerly all white census tracts
- Segregation declined most in small growing cities where the percentage of blacks is small

Source: Glaeser & Vigdor, 2001

Segregation in the 2000 Census - II

- Between 1990 and 2000, number of census tracts where over 80% of the population was black remained constant
- The decline in segregation has had no impact on a) very high percentage black census tracts, b) the residential isolation of most African Americans, and c) the concentration of urban poverty.

Source: Glaeser & Vigdor, 2001

How Segregation Can Affect Health

1. Segregation determines SES by affecting quality of education and employment opportunities.
2. Segregation can create pathogenic neighborhood and housing conditions.
3. Conditions linked to segregation can constrain the practice of health behaviors and encourage unhealthy ones.
4. Segregation can adversely affect access to medical care and to high-quality care.

Source: Williams & Collins, 2001

Segregation and Employment

- Exodus of low-skilled, high-pay jobs from segregated areas: "spatial mismatch" and "skills mismatch"
- Facilitates individual discrimination based on race and residence
- Facilitates institutional discrimination based on race and residence

Race and Job Loss Economic Downturn of 1990-1991

Racial Group	Net Gain or Loss
BLACKS	59,479 LOSS
WHITES	71,144 GAIN
ASIANS	55,104 GAIN
HISPANICS	60,040 GAIN

Source: Wall Street Journal analysis of EEOC reports of 35,242 companies

Race and Job Loss

Company	Percent Black		Reason
	Work Force	Losses	
Sears	16	54	Closed distribution centers in inner-cities; relocated to suburbs
Pet	14	35	Two Philadelphia plants shutdown
Coca-Cola	18	42	Reduced blue-collar workforce
American Cyanamid	11	25	Sold two facilities in the South
Safeway	9	16	Reduced part-time work; more suburban stores

Source: Sharpe, 1993: Wall Street Journal

Residential Segregation and SES

A study of the effects of segregation on young African American adults found that the elimination of segregation would erase black-white differences in

- Earnings
- High School Graduation Rate
- Unemployment

And reduce racial differences in single motherhood by two-thirds

Cutler, Glaeser & Vigdor, 1997

Segregation and Neighborhood Quality - I

- ↓ Municipal services (transportation, police, fire, garbage)
- ↓ Purchasing power of income (poorer quality, higher prices).
- ↓ Access to Medical Care (primary care, hospitals, pharmacies)

Segregation and Neighborhood Quality - II

- ↑ Personal and property crime
- ↑ Environmental toxins
- ↑ Abandoned buildings, commercial and industrial facilities

Segregation and Housing Quality

- ↑ Crowding
- ↑ Sub-standard housing
- ↑ Noise levels
- ↑ Environmental hazards (lead, pollutants, allergens)
- ↓ Ability to regulate temperature

Segregation and Health Behaviors

- ↓ Recreational facilities (playgrounds, swimming pools)
- ↑ Marketing and outlets for tobacco, alcohol, fast foods
- ↑ Exposure to stress (violence, financial stress, family separation, chronic illness, death, and family turmoil)

Segregation and Medical Care -I

- Pharmacies in segregated neighborhoods are less likely to have adequate medication supplies (Morrison et al. 2000)
- Hospitals in black neighborhoods are more likely to close (Buchmueller et al 2004; McLafferty, 1982; Whiteis, 1992).
- MDs are less likely to participate in Medicaid in racially segregated areas. Poverty concentration is unrelated to MD Medicaid participation (Greene et al. 2006)

Segregation and Medical Care -II

- Blacks are more likely than whites to reside in areas (segregated) where the quality of care is low (Baicker, et al 2004).
- African Americans receive most of their care from a small group of physicians who are less likely than other doctors to be board certified and are less able to provide high quality care and referral to specialty care (Bach, et al. 2004).

Racial Differences in Residential Environment

- In the 171 largest cities in the U.S., there is **not even one city** where whites live in ecological equality to blacks in terms of poverty rates or rates of single-parent households.
- **“The worst urban context in which whites reside is considerably better than the average context of black communities.”** p.41

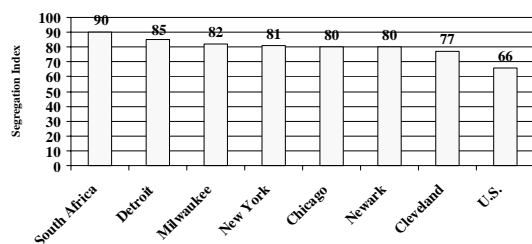
Source: Sampson & Wilson 1995

Segregation: Distinctive for Blacks

- Blacks are more segregated than any other group
- Segregation varies by income for Latinos & Asians, but high at all levels of income for blacks.
- Wealthiest blacks (> \$50K) are more segregated than the poorest Latinos & Asians (< \$15,000).
- Middle class blacks live in poorer areas than whites of similar SES and poor whites live in better areas than poor blacks.
- Blacks show a higher preference for residing in integrated areas than any other group.

Source: Massey 2004

American Apartheid: South Africa (de jure) in 1991 & U.S. (de facto) in 2000



Source: Massey 2004; Iceland et al. 2002; Glaeser & Vigitor 2001

Racism and Other Stress:

Racism can create conditions that increase exposure to traditional stressors

Segregation and Economic Stress

Poor persons from disadvantaged racial/ethnic backgrounds are poorer than the white poor

Race/Ethnicity and Wealth, 2000 Median Net Worth

Income	White	Black	Hispanic
All	\$79,400	\$7,500	\$9,750
Excl. Hm. Eq.	22,566	1,166	1,850
Poorest 20%	24,000	57	500
2 nd Quintile	48,500	5,275	5,670
3 rd Quintile	59,500	11,500	11,200
4 th Quintile	92,842	32,600	36,225
Richest 20%	208,023	65,141	73,032

Source: Orzechowski & Sepielli 2003, U.S. Census

Wealth of Whites and of Minorities per \$1 of Whites, 2000

Household Income	White	B/W Ratio	Hisp/W Ratio
Total	\$ 79,400	9¢	12¢
Poorest 20%	\$ 24,000	1¢	2¢
2 nd Quintile	\$ 48,500	11¢	12¢
3 rd Quintile	\$ 59,500	19¢	19¢
4 th Quintile	\$ 92,842	35¢	39¢
Richest 20%	\$ 208,023	31¢	35¢

Source: Orzechowski & Sepielli 2003, U.S. Census

Race and Economic Hardship, 1995

African Americans were more likely than whites to experience the following hardships ¹:

1. Unable to meet essential expenses
2. Unable to pay full rent on mortgage
3. Unable to pay full utility bill
4. Had utilities shut off
5. Had telephone shut off
6. Evicted from apartment

¹ After adjustment for income, education, employment status, transfer payments, home ownership, gender, marital status, children, disability, health insurance and residential mobility.

Bauman 1998; SIPP

Internalized Racism:

Acceptance of society's negative characterization can adversely affect health

Whites Stereotypes of Blacks %

1. Lazy	
Blacks are lazy	44
Neither	34
Blacks are hard working	17
2. Violent	
Blacks are prone to violence	51
Neither	28
Blacks are not prone to violence	15
3. Unintelligent	
Blacks are unintelligent	29
Neither	45
Blacks are intelligent	20
4. Welfare	
Blacks prefer to live off welfare	56
Neither	27
Blacks prefer to be self-supporting	13

Source: 1990 General Social Survey

Whites Stereotypes of Blacks (and Whites) %

1. Lazy		
Blacks are lazy	44	(5)
Neither	34	(36)
Blacks are hard working	17	(55)
2. Violent		
Blacks are prone to violence	51	(16)
Neither	28	(42)
Blacks are not prone to violence	15	(37)
3. Unintelligent		
Blacks are unintelligent	29	(6)
Neither	45	(33)
Blacks are intelligent	20	(55)
4. Welfare		
Blacks prefer to live off welfare	56	(4)
Neither	27	(22)
Blacks prefer to be self-supporting	13	(71)

Source: 1990 General Social Survey

White Americans' Stereotypes Percent Agreeing that Most Group Members Prefer to Live off Welfare

	Whites	Blacks	Hispanics	Asians	Jews	Southern Whites
Prefer to live off Welfare	3.7	56.1	41.6	16.3	2.4	12.9
Neither	21.5	26.5	30.5	31.6	14.6	35.2
Prefer to be Self-Supporting	70.5	12.7	18.3	40.6	75.7	41.4
DK/NA	4.3	4.7	9.7	11.5	7.3	10.5

Source: General Social Survey 1990

Internalized Racism and Health (Jerome Taylor and Colleagues)

A high score on internalized racism was related to:

1. Higher consumption of alcohol
2. Higher levels of psychological distress
3. Higher levels of depressive symptoms

Unequal Access:

Discrimination can lead to reduced access to desirable goods and services.

Race and Medical Care

- Across virtually every therapeutic intervention, ranging from high technology procedures to the most elementary forms of diagnostic and treatment interventions, minorities receive fewer procedures and poorer quality medical care than whites.
- These differences persist even after differences in health insurance, SES, stage and severity of disease, co-morbidity, and the type of medical facility are taken into account.
- Moreover, they persist in contexts such as Medicare and the VA Health System, where differences in economic status and insurance coverage are minimized.

Institute of Medicine, 2002

Ethnicity and Analgesia

A chart review of 139 patients with isolated long-bone fracture at UCLA Emergency Department (ED):

- All patients aged 15 to 55 years, had the injury within 6 hours of ER visit, had no alcohol intoxication.
- 55% of Hispanics received no analgesic compared to 26% of non-Hispanic whites.
- With simultaneous adjustment for sex, primary language, insurance status, occupational injury, time of presentation, total time in ED, fracture reduction and hospital admission, Hispanic ethnicity was the strongest predictor of no analgesia.
- After adjustment for all factors, Hispanics were 7.5 times more likely than non-Hispanic whites to receive no analgesia.

Todd, et al. 1993

Perceived Discrimination:

Experiences of discrimination may be a neglected psychosocial stressor

"..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

- 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

Recent Review

- **Identified 138 empirical studies**
- **65% (n=89) published between 2000-2004**
- **86% in U.S., but 20 studies from Europe, Canada, Australia/New Zealand and the Caribbean**
- **After adjustment for confounders, discrimination tends to be associated with poor health**
- **Similar to the literature on stress, consistent inverse association more often found for measures of mental health than physical health**

Paradies, 2006: [International Journal of Epidemiology](#)

Discrimination and Disparities in Health

Perceptions of discrimination have been shown to account for some of the racial differences in:

- self-reported physical health in the U.S. and New Zealand (Williams, et al., 1997; Ren, et al., 1999; Harris et al. 2006)
- birth outcomes in U.S. data (Mustillo et al. 2004).

Discrimination and Birth Outcomes

- A case-control study of AA women found an adjusted OR of 2.6 for VLBW infants for maternal exposure to discrimination in 3 or more domains (adjusted for SES, demographic, biomedical & behavioral variables)
- In CARDIA, self-reported discrimination associated with pre-term and LBW deliveries accounts for some of the racial disparities in birth outcomes

Collins, et al., 2004; Mustillo et al., 2004

Arab American Birth Outcomes

- 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

Lauderdale, 2006

Everyday Discrimination and Subclinical Disease

In the study of Women's Health Across the Nation (SWAN):

- Everyday Discrimination was positively related to subclinical carotid artery disease (IMT; intima-media thickness) for black but not white women
- chronic exposure to discrimination over 5 years was positively related to coronary artery calcification (CAC)

Troxel et al. 2003; Lewis et al. 2006

Discrimination and Health Care Behaviors

Recent studies indicate that experiences of discrimination are associated with:

- Delays in seeking treatment
- Lower adherence to treatment regimes
- Lower rates of follow-up

Conclusions - I

1. Racial disparities in health are large, pervasive and persistent over time.

Conclusions - II

1. Racial disparities in health are large, pervasive and persistent over time.
2. Inequalities in health are created by larger inequalities in society, of which racism is one determinant.

Conclusions - III

1. Racial disparities in health are large, pervasive and persistent over time.
2. Inequalities in health are created by larger inequalities in society, of which racism is one determinant.
3. Racial differences in health reflect the successful implementation of social policies. Eliminating them requires political will and commitment to implement new strategies to improve living and working conditions.

Conclusions - IV

1. Racial disparities in health are large, pervasive and persistent ...
 2. Inequalities in health are created by larger inequalities in society ...
 3. Racial differences in health reflect the successful implementation of social policies. Eliminating them requires political will ...
 4. Eliminating disparities in health requires (1) acknowledging and documenting the health consequences of racism, and (2) efforts to ameliorate their negative effects, dismantle the structures of racism and/or establish countervailing influences to the pervasive processes of racism.
-