Women’s Health and Health Care: What’s Race Got to Do With It?

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Controversies in Women’s Health
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Key Questions
1) What are the prevailing disparities in health and health care overall?
2) What are the specific disparities in women’s health and health care?
3) Why should we care?
4) Why do these disparities exist?
5) What can be done about them?

Disparities in Health and Health Care

- Disparity (Webster’s definition)
  - The condition or fact of being unequal, as in age, rank, or degree; difference

- Disparities in Health vs. Health Care
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What is the difference between life expectancy for White women vs. Black men?

1. 4 years
2. 8 years
3. 11 years
4. 17 years

Racial/Ethnic Disparities in Health
Racial/Ethnic Disparities in Health

- Overweight/obesity among adults
  - White women: 57.0%
  - Black women: 77.5%
  - White men: 69.5%
  - Black men: 62.0%
  - Mexican-American women: 71.4%
  - Mexican-American men: 74.1%

Health, United States, 2005. CDC

Racial/Ethnic Disparities in Health

- Cardiovascular Disease
  - Blacks with highest risk of hypertension
  - Heart disease death rate 29% higher among Blacks than Whites; stroke deaths 40% higher

- HIV/AIDS
  - Blacks and Hispanics account for 66% of adult and 82% of pediatric AIDS cases in 2001 (vs. 26% of U.S. population)

Health, United States, 2002. CDC

Racial/Ethnic Disparities in Health Care

- Blacks and Hispanics less likely to be insured or have usual source of health care (NCHS)
- Black Medicare recipients receive poorer quality of care (Schneider et al., JAMA 2002)
- Hispanic patients with long bone fractures less likely to receive analgesia in ED than non-Hispanic whites (Todd, et al., JAMA 1993)
Racial/Ethnic Disparities in Health and Health Care

• Institute of Medicine report *Unequal Treatment*
• AHRQ National Healthcare Disparities Reports
• Healthy People 2010 Goals

What are potential sources of disparities in care?

• Health systems-level factors – financing, structure of care; cultural and linguistic barriers
• Patient-level factors – including patient preferences, refusal of treatment, poor adherence, biological differences
• Disparities arising from the clinical encounter

*Unequal Treatment, Institute of Medicine*
National Healthcare Disparities Report

• AHRQ directed by Public Law 106-129 to develop two annual reports
  – National Healthcare Quality Report
  – National Healthcare Disparities Report

National Healthcare Disparities Report

• Key findings
  – Inequality in quality persists
  – Disparities come at a personal and societal price
  – Differential access may lead to disparities in quality
  – Opportunities to provide preventive care are frequently missed
  – Knowledge of why disparities exist is limited
  – Improvement is possible
  – Data limitations hinder targeted improvement efforts

Healthy People 2010

• Goal 1: Increase quality and years of healthy life
• Goal 2: Eliminate Health Disparities
Healthy People 2010

- Healthy People 2010 Health Disparities Priority Areas:
  1) Diabetes
  2) Immunizations
  3) HIV/AIDS
  4) Cardiovascular Disease
  5) Cancer
  6) Perinatal

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Disparities in Women’s Health Status

Kaiser Family Foundation, 2004
Disparities in Mortality

Heart Disease Mortality
Trends in heart disease mortality among women 35 years of age and older, by race and ethnicity, 1991–1995

Breast Cancer Mortality
MMWR, 2002
Morbidity

- African American women have the highest rate of HTN (40.3%), especially at young ages (NCHS, 1997)
- Latina, AI/AN and African American women have higher rates of Type II DM than white women (NCHS, 2000)
- Vietnamese women have an incidence rate of cervical cancer five times higher than white women (NCCDPHP, 1999)
Infant Mortality for African Americans and Whites, United States, 1980-2000

Mortality Rate Per 1,000 Live Births

African American
White

Lu, UCLA/ NCHS

Racial and Ethnic Disparities: Infant Mortality

NCHS, 2004
Racial and Ethnic Disparities: Heart Disease Mortality

Death Rates for Diseases of the Heart per 100,000 Women, 2002

Racial and Ethnic Disparities: Obesity

Percent of Obese (BMI ≥ 30) in U.S. Adults, 2006

Infant Mortality

• Major contributors to Infant Mortality
  – Congenital Anomalies/Chromosomal Disorders
  – Preterm Birth/Low Birth Weight
  – Sudden Infant Death Syndrome
  – Maternal Complications of Pregnancy

National Center for Health Statistics 2004
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Consequences of Prematurity

- Economic
  - Estimated $4.7B cost to employer-based health plans for care of premature infants in 2000
- Societal
  - VLBW survivors less likely to graduate from HS, obtain GED, enroll in college; lower IQs (Hack, et al., NEJM 2002)
  - Lower mean cognitive scores, higher ADHD risk among preterm/LBW children (Bhutta, et al., JAMA 2002)
Consequences of Prematurity: Long-Term Health

- Maternal
  - Women with preterm/ LBW deliveries have adjusted OR of death from ischemic heart disease of 6.7 (2.8, 22.9) as compared with reference population (Smith et al., Lancet 2001)

- Fetal
  - Increased risk of end-stage renal disease in blacks amongst adults born low birth weight (Lackland et al., J Clin HTN 2001)

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Why do disparities exist?

1. Biologic differences
2. Environmental differences
3. Different health behaviors
4. Differential access to care
5. Different health beliefs and preferences
6. Differential treatment within the healthcare system
Determinants of Health

- Health Care: 10%
- Genetic: 30%
- Behavior: 40%
- Environment: 20%

Adapted from McGinnis et al., Health Affairs 2002

Disparities in Prematurity: Chronic Disease

- Minority women more likely to enter pregnancy with various chronic diseases:
  - Hypertension
  - Diabetes
  - Systemic lupus erythematosus
  - Asthma
  - Obesity
Disparities in Prematurity: Infection

Goldenberg, RL et al., NEJM 1997

Preterm Delivery: Implicated Infections

• Organisms
  – T. pallidum
  – N. gonorrhoea
  – Group B Streptococci
  – U. Urealyticum
  – M. hominis
  – C. trachomatis
  – T. vaginalis
  – Bacteroides sp.

• Infections
  – Bacterial vaginosis
  – Pyelonephritis
  – Bacteriuria
  – Pneumonia
  – Periodontal disease
  – Septicemia

Disparities in Prematurity: Inflammation

• Increase in MMP-9, IL-1, IL-8 and COX-2 expression in placental membranes from A-A (vs. Caucasians) after in vitro challenge with LPS (Fortunato et al., Am J Obstet Gynecol 2004; Menon et al., Am J Reprod Immunol 2006)

• Carriage of particular allele of IL-1ra gene, shown to be associated with blunted response to vaginal infection, decreased PTB, is 4 times less common among A-A (Nguyen et al., Obstet Gynecol 2004; Genc et al., Am J Obstet Gynecol 2004)
Nutrition → Food Insecurity
- The limited or uncertain
  - availability of nutritionally adequate and safe foods
  - ability to acquire acceptable foods in socially
  acceptable ways (LSRO)
- In the US, roots are economic (or social)
- Household-level concept
- Cyclical & episodic; generally recurrent
- Hunger is an indicator of, and possible consequence of, food insecurity

Disparities in Prematurity: Environment
- Nutrition
  - Food insecurity associated with low birth weight (AOR 3.2 [1.4, 7.2], Bryant-Borders et al., Obstet Gynecol 2006)
  - In non-pregnant women, food insecurity associated with obesity (AOR 2.45, P = 0.02, Martin et al. J Nut 2007) and with diabetes (AOR 2.2 [1.2, 3.9], Seligman et al., JGIM 2007)

Slide courtesy of H. Seligman
Disparities in Prematurity: Environment

- Environmental hazards
- Social environment
  - Social capital
  - Stress
  - Perceived racism/discrimination

Stress and Racism

- Jackson et al., MCH Journal 2001
  - Focus groups and interviews involving college-educated Black women revealed sense of obligation to protect children from racism and workplace racism as significant stressors
- Rosenberg et al., Epidemiology 2002
  - Participants in Black Women’s Health Study with self-reported experiences with racism 30% more likely to have preterm birth

Disparities in Prematurity: Stress and Racism

Stress

Mother

Placenta

Fetus

Hypothalamus

CRH

Pituitary

ACTH

Adrenal

Cortisol

Norepinephrine

Hypothalamus

CRH

Pituitary

ACTH

Adrenal

Cortisol

DS

Liver

Estriol

16 alpha OH DS

Lu/Adapted from Hobel 1998
Disparities in Prematurity: Health Behaviors

- Smoking
- Alcohol use
- Illicit substance use/abuse
- Sexual behaviors
- Exercise

Substance Use among Women age 18-44

National Survey of Drug Use and Health Report, 1/2004
Disparities in Pregnancy Health: Health Behaviors

• Substance abuse in pregnancy related to
  – Age 18-30 (vs. 31-44)
  – Single marital status
  – Less than high school education
• NOT related to race/ethnicity
  – May be different prevalence of use of particular substances between women of different races

Ebrahim et al., Obstet Gynecol 2003
Chasnoff et al. NEJM 1990

Disparities in Health: Exercise

Income disparity in exercise rate

NYC DOH, 2004
Disparities in Prematurity: Health Care

- Prenatal care
  - Access
    - African Americans, Native Hawaiians, Pacific Islanders, American Indians, Alaska Natives and Hispanics less likely to receive prenatal care in first trimester (National HC Disparities Report)

Disparities in Health Care: Access

Kaiser Family Foundation, 2004

Disparities in Health Care: Access

Kaiser Family Foundation, 2004
Current Policies: Medicaid

- Sixth Omnibus Budget Reconciliation Act (SOBRA), 1986

Kaiser Family Foundation
State Health Facts Online

Current Policies: Medicaid

- Medicaid Income Eligibility for Working Parents, 2001

Kaiser Family Foundation/National Women’s Law Center

Disparities in Health Care: Quality

- Many racial and ethnic minority groups more likely to report poor communication with MDs
- Barriers to care (long wait times, difficulty obtaining referrals, convenient office hours) common for minority populations

National Healthcare Disparities Report
Disparities in Health Care: Quality

- From NHDR:
  - Blacks have higher rates of Pap tests, lower rates of mammograms; Hispanics have lower rates of both as compared with Whites
  - After a first heart attack Blacks and Hispanics are less likely to receive ASA
  - Postoperatively, Black and Hispanic women are more likely to have septicemia; Black women are more likely to have VTE

Disparities in Health Care: Health Beliefs

- Minority and low-income women less likely to have prenatal genetic testing
  - Mediated by different levels of faith/fatalism, value of information (Kuppermann et al., Obstet Gynecol 2006)
- Many African American patients facing lung surgery worry about risk of tumor spread due to air exposure (Margolis et al., Ann Intern Med, 2003)

Disparities in Health Care: Health Beliefs

- Among potential candidates for cardiac catheterization in VA,
  - A-A more often stated preference to rely on God to heal heart problems
  - Fewer A-A had friends or family strongly encourage procedure
  - Fewer A-A had personal or family experience with cardiac or other surgical procedures

Kressin et al., Acad Health, 2001
Disparities in Health Care: Health Beliefs

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What is our most effective tool against health and health care disparities?

1. Clinical interventions
2. Community-based interventions
3. Social justice/legal interventions
4. Research
5. Health care policy change

Clinical Interventions:

What can we do?

• Predict risk
• Educate patients
• Promote healthy behaviors/ lifestyles
• Provide medical technologies equitably
• Leverage opportunities for quality care

Other Interventions:

Support Community-Based Projects

• Stress reduction
• Support for partner involvement
• Increased social capital/ collective efficacy
  – "One Hundred Intentional Acts of Kindness to Pregnant Women" (Healthy African American Families Project, L.A.)
### Other Interventions: Support Community-Based and Social Justice Projects

- Improved food availability
- Environmental justice
- Strategies to reduce institutionalized racism

### Other Interventions: Engage in Research

- Basic science
- Clinical
- Health services
- Importance of community-based participatory efforts

### Other Interventions: Advocate for Health Care Policy Change

- Financing of women’s health care
- Effect of other social policies on women’s ability to access care
- Establishment of minimum quality standards/best practices for care
- Incentives for reduction racial/ethnic disparities
- Improve workforce diversity
- Improve cultural competence
Key Questions

- What are the prevailing disparities in health and health care?
- What are the specific disparities in obstetrical care and pregnancy outcomes?
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What’s Race Got to Do with It?

Race is “a social concept that changes over time. ...Research documents the role and consequences of race in primary social institutions and environments, including the criminal justice, education and health systems, job markets, and where people live...Refusing to acknowledge the fact of racial classification, feelings, and actions, and refusing to measure their consequences will not eliminate racial inequalities. At best, it will preserve the status quo.”

American Sociological Association, 2003

"It's a baby. Federal regulations prohibit us from asking her race, age, or gender."
Thank you

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