Inequities in Birth Outcomes in Northern Virginia

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Virginia Department of Health
Objectives

• Discuss inter-related frameworks for understanding inequities in birth outcomes
  • Health Equity and Social Justice
  • The Life Course Perspective

• Identify inequities in SDOH and birth outcomes affecting NOVA

• Discuss strategies to promote equitable birth outcomes
Office of Minority Health and Public Health Policy

• **Vision:** Advancing *health equity* for all Virginians

• **Mission:** To identify *health inequities*, assess their root causes, and address them by promoting *social justice*, influencing policy, establishing partnerships, providing resources, and educating the public
## Infant Mortality, Northern VA, 2006

<table>
<thead>
<tr>
<th></th>
<th>NOVA</th>
<th>Virginia 2006</th>
<th>Nation 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>123</td>
<td>760</td>
<td>28,440</td>
</tr>
<tr>
<td>Rates (per 1,000 live births)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant deaths</td>
<td>4.8</td>
<td>7.1</td>
<td>6.8</td>
</tr>
<tr>
<td>Neonatal deaths</td>
<td>3.5</td>
<td>4.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Postneonatal deaths</td>
<td>1.3</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Race-specific rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>4.1</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Black</td>
<td>10.4</td>
<td>13.8</td>
<td>13.7</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>3.6</td>
<td>4.1</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>NOVA</td>
<td>Virginia 2006</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
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<td></td>
</tr>
<tr>
<td>Number</td>
<td>2205</td>
<td>8750</td>
<td></td>
</tr>
<tr>
<td>Percent <strong>LBW</strong> (&lt;2500 g)</td>
<td>5.8</td>
<td>6.2</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>5.9</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>9.9</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>5.8</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>Percent <strong>VLBW</strong> (&lt;1500 g)</td>
<td>0.9</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>0.9</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2.2</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1.0</td>
<td>1.1</td>
<td></td>
</tr>
</tbody>
</table>

*Singleton births
Definitions

Health Disparities- “a population where there is a significant disparity [difference] in the overall rate of disease incidence, prevalence, morbidity, mortality, or survival rates in the population as compared to the health status of the general population.”- Minority Health and Health Disparities Research and Education Act, 2000
Definitions

Health Inequities- “Disparities in health [or health care] that are systemic and avoidable and considered unfair or unjust.” - Troutman, 2006

Health Equity- “The absence of systematic disparities in health ... between groups with different levels of underlying social advantage/disadvantage- that is wealth, power, or prestige.” - Braveman, 2003
Social Justice

A virtue that, when achieved, results in equitable (fair) access and exposure to social, economic, and political resources, opportunities, burdens and their consequences
Health Equity and Social Justice Framework

• Marginalization based on class, race, gender, geography, and other social classifications underlies the unfair distribution of social, economic and political resources, opportunities, and burdens

• This unfair distribution of resources and opportunities is manifest through differential access and exposure to social determinants of health (SDOH)

• Through direct and indirect mechanisms, the result is health inequities
## Social Determinants of Health (SDOH)

<table>
<thead>
<tr>
<th>Socioeconomic status</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Education, income, job status</td>
<td>Social support &amp; capital</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Health care services</td>
</tr>
<tr>
<td>• e.g. class, race, gender</td>
<td>Transportation</td>
</tr>
<tr>
<td>Housing</td>
<td>Working conditions</td>
</tr>
<tr>
<td>Childhood social and economic exposures</td>
<td>Democratic participation</td>
</tr>
<tr>
<td>Food security</td>
<td></td>
</tr>
<tr>
<td>Physical environment</td>
<td></td>
</tr>
</tbody>
</table>
Levels of Racism

Personally Mediated

• Differential assumptions and about the abilities, motives and intentions of others according to their race that may lead to differential actions towards members of that race

Internalized

• Acceptance by members of the stigmatized race of negative messages about their own intrinsic self worth (self devaluation, helplessness and hopelessness)

Institutionalized

• The differential access to goods, services and opportunities of society by race. May be manifested through law, institutional structure, covert or overt privilege & inherited disadvantage

SDOH Interact to Influence Health

Determine behavioral choices

Influence exposure to environmental risks

Create chronic, toxic stress that affects mental and physical health

Act across the life span and generations
Importance of Social Determinants of Health

Social determinants predict the greatest proportion of health status variance

Social determinants are “fundamental causes of disease” - Link and Phelan, 1995
Life-Course Perspective

Fig. 1. How differential exposures to risk factors (downward arrows) and protective factors (upward arrows) over the life course affect developmental trajectories and contribute to disparities in birth outcomes. The lower reproductive potential of African American women, relative to White women, results from their cumulative exposure to more risk factors and less protective factors across the life span, particularly during sensitive periods of development.
SDOH in Northern Virginia
Percent Population Nonwhite by Census Tract, 2000

Source: Census 2000, SF1 P7.
NOVA

Children below Federal Poverty Level by Census Tract

Child Poverty
% population (under 18 years) below federal poverty level

- ≤ 4.9
- 5.0 - 9.9
- 10.0 - 19.9
- 20.0 - 29.9
- ≥ 30.0


[Map showing distribution of child poverty levels across NOVA counties: Loudoun, Clarke, Fauquier, Rappahannock, Culpeper, Prince William, Stafford, Manassas, Manassas Park, Fairfax City, Fairfax, Arlington, Falls Church, Alexandria.]
NOVA
Low Education* Census Tracts

Percent adults 25-64 years old without high school diploma or GED

- 0.00
- 0.01 - 14.99
- 15.00 - 19.99
- 20.00 - 24.99
- 25.00 - 39.99
- 40.00 - 80.59

* United States Department of Agriculture: Economic Research Service, defines a low education area as having 25% or more of its residents 25-64 years old with neither a high school diploma or GED. See http://www.ers.usda.gov/Briefing/Rurality/Typology/.
NOVA Service Area
History of female-headed households by census tract

Over 25% of total families with own children were female-headed in the:
- Current decade (2000)
- Last 2 decades (1990-2000)
- Last 3 decades (1980-2000)

Inequities in Birth Outcomes in Northern Virginia
Percent Low Birth Weight by Education and Race/Ethnicity, Northern Virginia, 2006

Educational Attainment

Less than 12 years
12 years
1-4 years of college
5+ years of college

Percent LBW

White, NH
Black, NH
Hispanic
Total
Infant Mortality Rate by Education and Race/Ethnicity, Northern Virginia, 2006

Educational Attainment

- Less than 12 years
- 12 years
- 1-4 years of college
- 5+ years of college

IMR

- White, NH
- Black, NH
- Hispanic
- Total
Low-Birth Weight Rate (LBW, per 100) by Census Tract, 1996-2005

Kernel Density Analysis of Infant Mortality in Virginia (Analysis based on Census Block Group Data—1990-2005)

Fairfax County, Arlington & Prince William County and Alexandria City
Kernel Density Analysis of Infant Mortality in Virginia
(Analysis based on Census Block Group Data—1990-2005)
Kernel Density Analysis of Infant Mortality in Virginia
(Analysis based on Census Block Group Data—1990-2005)
How Do We Address Inequities in Birth Outcomes?
A Framework for Health Equity

**UPSTREAM**

**SOCIAL INEQUALITIES**
- Oppression:
  - Race/ethnicity
  - Class
  - Gender
  - Immigration
  - Status
  - Etc.

**INSTITUTIONAL POWER**
- Corporations & other businesses
- Gov’t agencies
- Schools

**NEIGHBORHOOD CONDITIONS**
- Environment
- Social
- Physical
- Residential Segregation

**RISK BEHAVIORS**
- Smoking
- Nutrition
- Physical activity
- Violence

**DISEASE & INJURY**
- Infectious disease
- Chronic disease
- Injury (intentional & unintentional)

**HEALTHCARE ACCESS**

**DOWNSTREAM**

**INDIVIDUAL HEALTH KNOWLEDGE**

**GENETICS**

**MORTALITY**
- Infant mortality
- Life expectancy

**HEALTH STATUS**

Source: Bay Area Health Inequities Initiative
Eliminating the Black-White Gap in Birth Outcomes: A 12-Point Plan

BEFORE AND BETWEEN PREGNANCY CARE

1. Provide interconception care to women with prior adverse pregnancy outcomes

2. Increase access to preconception care for African American women

3. Improve the quality of prenatal care

4. Expand healthcare access over the life course

Eliminating the Black-White Gap in Birth Outcomes: A 12-Point Plan

FAMILY AND COMMUNITY SYSTEMS

5. Strengthen father involvement in African American families
6. Enhance service coordination and systems integration
7. Create reproductive social capital in African American communities
8. Invest in community building and urban renewal
<table>
<thead>
<tr>
<th>Key Principles of CBPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Israel et al., 1998)</td>
</tr>
<tr>
<td>Recognizes community as a unit of identity</td>
</tr>
<tr>
<td>Builds on strengths and resources within community</td>
</tr>
<tr>
<td>Facilitates collaborative partnerships in all phases of research</td>
</tr>
<tr>
<td>Integrates knowledge and action for mutual benefit of all partners</td>
</tr>
<tr>
<td>Promotes a co-learning and empowering process that attends to social inequalities</td>
</tr>
<tr>
<td>Involves a cyclical and iterative process</td>
</tr>
<tr>
<td>Addresses health from both positive and ecological perspectives</td>
</tr>
<tr>
<td>Disseminates findings and knowledge gained to all</td>
</tr>
</tbody>
</table>
Eliminating the Black-White Gap in Birth Outcomes: A 12-Point Plan

SOCIAL JUSTICE AND SOCIAL DETERMINANTS OF HEALTH

9. Eliminate the education gap

10. Reduce poverty among Black families

11. Support working mothers and families

12. Undo racism
Social Justice and SDOH

• Requires new roles for health and medical professionals
  • Educate policy makers about SDOH
  • Educate the public about SDOH
  • Form coalitions and partnerships across sectors
  • Advocate for healthy public policy
Reports on Social Determinants

• The Black Report, 1980
  • Commissioned by British Labour Party

• The Acheson Report, 1998
  • Commissioned by British Labour Party

• Reaching for a Healthier Life, 2007
  • John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health

• RWJF Commission for a Healthier America, 2008

• The World Health Organization Commission on the Social Determinants of Health, 2008
Social Determinants

• Health Impact Assessment (HIA) for all policies likely to have direct or indirect influence on health

• Monitor health inequities & SDOH and evaluate effectiveness of measures to reduce them

• Priority focus on policies to improve health and reduce inequities among women of childbearing age, pregnant women, and children
Social Determinants

Policies that affect the steepness of the SES ladder

- **Education policies**
  - Quality early childhood and K-12 education
  - Reduced financial barriers to college

- **Fiscal and economic policies**
  - Minimum wage
  - Support for families with newborns
  - EITC and Child tax credit

- **Skills training policies**
  - Increased opportunities for job skills training
  - Job training for downsized employees
Social Determinants

Policies that buffer the adverse consequences of living lower on SES ladder

• **Policies Affecting the Environment**
  - Segregation and affordable housing
  - Enforcement of housing codes
  - Land use planning and community redevelopment
  - Reduce crime

• **Policies Affecting the Workplace**
  - Reduce exposure to toxins and psychosocial stress
  - Increase opportunities for control over work demands
  - Provide sufficient family leave and reduce work-family conflict
Social Determinants

Policies that buffer the adverse consequences of living lower on SES ladder

• **Policies Enabling Healthier Behaviors**
  • Ban public smoking
  • Subsidize treatment for substance use/abuse
  • Increase cigarette tax
  • Increase availability of nutritious foods in schools
  • Limit tobacco and alcohol advertising and sales
  • Increase access to recreational facilities through construction incentives and opening public facilities after hours
  • Provide incentives for full service grocery stores
Social Policy is Health Policy

“Increasing job opportunities, providing education and training for better jobs, investing in our schools, improving housing, integrating neighborhoods, giving people more control over their work-these are as much health strategies as diet, smoking, and exercise.”

-David Williams, PhD., Norman Professor of Public Health, Department of Society, Human Development and Health Harvard University School of Public Health
“Of all the forms of inequality, injustice in health is the most shocking and the most inhumane.”

-Dr. Martin Luther King, Jr.
Questions, Comments, Ideas???

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Division of Health Equity

Culturally/ Linguistically Appropriate Health

- Culturally Appropriate Public Health Training Series
- Medical Interpreter Training Grants
- Language Needs Assessments
- District Capacity Building Grants

Health Equity Initiatives

- Community Based Participatory Research & Interventions
- Health Equity Workshops
- Train the Trainer

Minority Health

- State Office of Minority Health
- Minority Health Advisory Committee

www.CLASActVirginia.org

VDH Virginia Department of Health
Protecting You and Your Environment
High Priority Target Areas

Multiple indicators:
- Race
- Poverty
- Unemployment
- Education
- Mortality Rates
- Infant Data (LBW, IM)
- Fiscal Stress
- Elderly
- Select Health Conditions
- Other social indicators (crime, housing quality, etc.)

Use of GIS (Geographic Information System)
- To identify high priority target areas
- To evaluate the health status, SDOH, and health needs of communities at various levels
  - Jurisdictional, Census Tract, Census Block Group, Neighborhood