Starting Early:
A Life Course Perspective on Child Health Disparities

Tina L. Cheng, MD, MPH

October 2012
DC-Baltimore Research Center on Child Health Disparities
Presentation Objectives

- Provide context for the uniqueness of children in considering health disparities
- Define the differences in child versus adult health, the 5 D’s
- Discuss research efforts to address child health disparities
Institute of Medicine Report

• 2003 Evidence-based review by panel of experts
• Offered broad range of recommendations
• Only 5 out of 103 studies addressed child health
<table>
<thead>
<tr>
<th>Dimensions of child well-being</th>
<th>Dimension 1</th>
<th>Dimension 2</th>
<th>Dimension 3</th>
<th>Dimension 4</th>
<th>Dimension 5</th>
<th>Dimension 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average ranking position</td>
<td>Material well-being</td>
<td>Health and safety</td>
<td>Educational well-being</td>
<td>Family and peer relationships</td>
<td>Behaviours and risks</td>
<td>Subjective well-being</td>
</tr>
<tr>
<td>for all 6 dimensions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>4.2</td>
<td>10</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>7.2</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Finland</td>
<td>7.5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Spain</td>
<td>8.0</td>
<td>12</td>
<td>6</td>
<td>15</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Switzerland</td>
<td>8.3</td>
<td>5</td>
<td>9</td>
<td>14</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Norway</td>
<td>8.7</td>
<td>2</td>
<td>8</td>
<td>11</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Italy</td>
<td>10.0</td>
<td>14</td>
<td>5</td>
<td>20</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Ireland</td>
<td>10.2</td>
<td>19</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Belgium</td>
<td>10.7</td>
<td>7</td>
<td>16</td>
<td>1</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>11.2</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Canada</td>
<td>11.8</td>
<td>6</td>
<td>13</td>
<td>2</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Greece</td>
<td>11.8</td>
<td>15</td>
<td>18</td>
<td>16</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Poland</td>
<td>12.3</td>
<td>21</td>
<td>15</td>
<td>3</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>12.5</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>France</td>
<td>13.0</td>
<td>9</td>
<td>7</td>
<td>18</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Portugal</td>
<td>13.7</td>
<td>16</td>
<td>14</td>
<td>21</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Austria</td>
<td>13.8</td>
<td>8</td>
<td>20</td>
<td>19</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Hungary</td>
<td>14.5</td>
<td>20</td>
<td>17</td>
<td>13</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>United States</td>
<td>18.0</td>
<td>17</td>
<td>21</td>
<td>12</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>18.2</td>
<td>18</td>
<td>12</td>
<td>17</td>
<td>21</td>
<td>21</td>
</tr>
</tbody>
</table>

OECD countries with insufficient data to be included in the overview: Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, the Slovak Republic, South Korea, Turkey.
Child Well-being Rankings x Gini Coefficient

Wise PH, Blair ME. Ambul Pediatr 2007: 7:, 265-6
Invitational conference 2008 developed a research action agenda

Need for research on biologic, environmental and psychosocial factors

Need for study of measures

Need for intervention
Who Has the Health Disparity?

- “Health disparities should be defined, investigated, and ameliorated based on race and ethnicity, socioeconomic status, generation, and geography, as well as their complex interactions.”
What is a “Disparity”?

• “Disparities should be defined not simply as a difference but as an inequitable difference that is potentially systematic and avoidable.”
What Disparity?

• Health outcome

• Health care

• “Health disparities research should involve consideration of life chances, opportunity and risk, and quality of life in a way that includes psychosocial and socioeconomic perspectives, as well as more traditional attention to health status and the provision of health care.”
Levels at Which Disparities are Produced

- Environmental Exposures and Opportunities
- Access to Health Care
- Quality of Health Care
- Health Outcome

Jones Camara P. *Phylon* 2002;50:7-22
Potential Sources of Disparities in Health Care

**Patient**
- Patient preferences
- Refusal of treatment
- Adherence
- Biological differences
- Health literacy

**Provider**
- Poor communication
- Discrimination

**Health system factors**
- Access, Financing, Structure of care
- Cultural and linguistic barriers

---

*Image credit: Johns Hopkins Medicine*
When or Where Did the Disparity Occur?

NRC IOM Model of Children’s Health and Its Influences

Reaching for a Healthier Life: Facts on SES and Health in the U.S.
http://www.macses.ucsf.edu/downloads/Reaching_for_a_Healthier_Life.pdf
How did the Disparity Occur?

McEwen B. NEJM. 1998
The Evolution of Health Disparities Research

- **1st Era**: Poverty as Threshold
- **2nd Era**: Gradients
- **3rd Era**: Mechanisms
- **4th Era**: Multiple Levels of Influence
- **5th Era**: Interactions, Systems, Causality
- **6th Era**: ?? Intervention and Translation to Programs & Policy

Adler & Stewart. Ann NY Acad Sci 2010;1186:5-23
Issues Unique to Children:
The FIVE “D’s”

- Demographic Patterns
- Developmental Change
- Dependency
- Differential Epidemiology
- Dollars/ Financing

# Issues Unique to Children: D1. Demographic Patterns

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children/Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poverty reduced in part because of Medicare</td>
<td>• Disproportionate high rates of poverty</td>
</tr>
<tr>
<td></td>
<td>• Disproportionate racial and ethnic diversity</td>
</tr>
</tbody>
</table>
US Census Bureau

“Tipping Point”

The Census Bureau confirmed that minority births in the United States outnumbered white births for the first time in the year that ended July 2011.

No data available for 2009-10.

Non-white babies now outnumber white babies in America for the first time.

Second.
Figure 1: Percentage of children ages 0–17 in the United States by race and Hispanic origin, 1980–2011 and projected 2012–2050

NOTE: The acronym NH refers to non-Hispanic origin. The acronym NHPI refers to the Native Hawaiian and Other Pacific Islander population. Each group represents the non-Hispanic population, with the exception of the Hispanic category itself. Race data from 2000 onward are not directly comparable with data from earlier years. Data on race and Hispanic origin are collected separately. Persons of Hispanic origin may be of any race. Population projections are based on Census 2000 and may not be consistent with the 2010 Census results.


U.S. Poverty Status by Age Group, 1980-2009

Poverty Level in 2010:
$22,000 family of 4
One out of five children (22 percent) lived below poverty in the United States in 2010.

More than two out of five (44 percent) children lived in low-income families in the United States in 2010.
2012 UNICEF Report

Measuring child poverty

New league tables of child poverty in the world’s rich countries

The US had the highest poverty rate compared to other developed countries.
Fig. 11 Spending on families and children

- Cash transfers
- Tax breaks towards families
- Services

Source: Data for public spending are from the OECD Family Database, around 2007.
Fig. 11a Government spending on families and children compared to reductions achieved in relative child poverty due to taxes and transfers

![Graph showing the relationship between government spending on families and reductions in relative child poverty rates. The graph includes data points for various countries, with one highlighted for the United States (US).]
## Children in Poverty by Race and Hispanic Origin: 2010

<table>
<thead>
<tr>
<th>Race and Hispanic Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Average</td>
<td>22%</td>
</tr>
<tr>
<td>African American</td>
<td>38%</td>
</tr>
<tr>
<td>American Indian</td>
<td>35%</td>
</tr>
<tr>
<td>Asian and Pacific Islander</td>
<td>14%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>32%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>13%</td>
</tr>
</tbody>
</table>

**Source:** U.S. Census Bureau, 2010 American Community Survey.
Determinants of Health: Early Deaths

- Genetics: 30%
- Social Circumstance: 15%
- Environment Exposures: 5%
- Medical Care: 10%
- Behavior: 40%

A Model of Children’s Health & Influences

Selected studies linking childhood SES to chronic disease in adulthood

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Journal</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidfeldt, J. et al.</td>
<td>2007</td>
<td>American Journal of Epidemiology</td>
<td>Type 2 diabetes</td>
</tr>
<tr>
<td>James, S.A. et al.</td>
<td>2006</td>
<td>American Journal of Public Health</td>
<td>Obesity</td>
</tr>
<tr>
<td>Lawlor, D.A. et al.</td>
<td>2006</td>
<td>American Journal of Epidemiology</td>
<td>Mortality from cardiovascular disease, diabetes, respiratory disease, smoking-related cancers, and stomach cancer</td>
</tr>
<tr>
<td>Claussen, B. et al.</td>
<td>2003</td>
<td>Journal of Epidemiology and Community Health</td>
<td>Cardiovascular disease mortality</td>
</tr>
<tr>
<td>Langenberg, C. et al.</td>
<td>2003</td>
<td>Journal of Epidemiology and Community Health</td>
<td>Obesity</td>
</tr>
<tr>
<td>Poulton, R. et al.</td>
<td>2002</td>
<td>Lancet</td>
<td>Cardiovascular and dental health at age 26</td>
</tr>
<tr>
<td>Frankel, S. et al.</td>
<td>1999</td>
<td>American Journal of Epidemiology</td>
<td>Stroke mortality</td>
</tr>
<tr>
<td>Glikson, M.D. et al.</td>
<td>1995</td>
<td>Journal of Epidemiology and Community Health</td>
<td>Coronary heart disease</td>
</tr>
<tr>
<td>Author</td>
<td>Year</td>
<td>Journal</td>
<td>Outcome</td>
</tr>
<tr>
<td>--------------------</td>
<td>------</td>
<td>----------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Al Salmi, I. et al.</td>
<td>2008</td>
<td>Diabetes Care</td>
<td>Impaired glucose tolerance and Type 2 diabetes</td>
</tr>
<tr>
<td>Li, S. et al.</td>
<td>2008</td>
<td>Kidney International</td>
<td>Chronic kidney disease</td>
</tr>
<tr>
<td>Kajantie, E. et al.</td>
<td>2006</td>
<td>Journal of Clinical endocrinology and Metabolism</td>
<td>Spontaneous hypothyroidism</td>
</tr>
<tr>
<td>Kajantie et al.</td>
<td>2005</td>
<td>International Journal of Epidemiology</td>
<td>Cardiovascular and all-cause mortality</td>
</tr>
<tr>
<td>Barker, D.J. et al.</td>
<td>2002</td>
<td>Journal of Hypertension</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Eriksson, J. et al.</td>
<td>2000</td>
<td>Hypertension</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Forsen, T. et al.</td>
<td>2000</td>
<td>Annals of Internal Medicine</td>
<td>Type 2 diabetes</td>
</tr>
<tr>
<td>Frankel, S. et al.</td>
<td>1996</td>
<td>Lancet</td>
<td>Coronary heart disease</td>
</tr>
</tbody>
</table>
• Examined the link between childhood stressors and adult health
• N=17,000 surveyed on past history of abuse, neglect, family dysfunction and current behavior and health
• As the number of ACE increases, the risk for poor health outcomes increase: substance use, COPD, depression, fetal death, heart disease, liver disease, IPV, STIs, suicide attempts, unintended pregnancies

Adverse Childhood Experience (ACE) Study: CDC and Kaiser Permanente

Middlebrooks & Audage, CDC 2008
Childhood Experiences Underlie Chronic Depression

% With a Lifetime History of Depression

ACE Score

http://www.cdc.gov/ace/about.htm
How the first nine months shape the rest of your life

The new science of fetal origins

By Annie Murphy Paul
D1. Demographic Patterns: Implications

- Substantial investment is needed to understand and address social influences on child and adolescent health
- Evidence-based interventions with high risk or disadvantaged families (e.g. home visiting and Head Start) must be supported
- Addressing racial/ethnic and socioeconomic disparities must be a priority in child health with implications for adult health
## Issues Unique to Children: D2. Developmental Change

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children/Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Health maintenance</td>
<td>• Enhance developmental progress</td>
</tr>
<tr>
<td>• Prevention of bad sequelae</td>
<td></td>
</tr>
<tr>
<td>• Rehabilitative</td>
<td>• Habilitative</td>
</tr>
</tbody>
</table>
National Research Council & IOM Definition of Child Health

“...the extent to which individual children or groups of children are able or enabled to
a) develop and realize their potential,
b) satisfy their needs, and
c) develop the capacities that allow them to interact successfully with their biological, physical, and social environments.”

IOM & National Research Council
Children’s Health, The Nation’s Wealth, 2004
### Domains of Child Health

<table>
<thead>
<tr>
<th>Health Conditions</th>
<th>Functioning</th>
<th>Health Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Alterations in health status due to disease, disability or injury</td>
<td>• Physical, cognitive, emotional, and social</td>
<td>• Competency and capacity in physical, cognitive, emotional,</td>
</tr>
<tr>
<td>• Symptoms</td>
<td>functioning and deficits</td>
<td>emotional, social well-being and developmental potential</td>
</tr>
<tr>
<td></td>
<td>• Functional deficit, disability</td>
<td>• Resilience</td>
</tr>
<tr>
<td></td>
<td>• Restriction in activity</td>
<td></td>
</tr>
</tbody>
</table>
D2. Developmental Change: Implications

- To address disparities must focus on maximizing potential and independence rather than regaining lost skills
- Evaluation of the care models for children must include functional and developmental outcomes
- Special issues of adolescents and their transition to adulthood must be addressed
## Issues Unique to Children: D3. Dependency

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children/Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Independent and autonomous</td>
<td>• Dependency on adults</td>
</tr>
<tr>
<td></td>
<td>• Parents are essential partners</td>
</tr>
<tr>
<td></td>
<td>• Team members: Family, child care providers, teachers, others</td>
</tr>
</tbody>
</table>
D3. Dependency: Implications

- To address disparities community collaboration is necessary and must include child care, schools and families as key partners
- Services, supports, and evaluation must include the health functioning of families, recognizing that most children have little autonomy in health care
# Issues Unique to Children: D4. Differential Epidemiology

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children/Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Large number of common chronic conditions</td>
<td>• Predominantly healthy</td>
</tr>
<tr>
<td></td>
<td>• Relatively rare conditions</td>
</tr>
<tr>
<td>• Care delivery: Subspecialists in the community</td>
<td>• Care delivery: Subspecialists based in academic health centers</td>
</tr>
</tbody>
</table>
D4. Differential Epidemiology: Implications

• Prevention is critical, especially for more common chronic conditions (e.g. obesity, asthma, mental health conditions)

• Specialty care access is needed
"I’m sorry, but your HMO will pay for a pound of cure, but not an ounce of prevention."
### Issues Unique to Children: D5. Dollars/Financing

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children/Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Higher cost</td>
<td>• Overall costs are small</td>
</tr>
<tr>
<td>• Private insurers and Medicare</td>
<td>• Private insurers, State Medicaid and CHIP</td>
</tr>
<tr>
<td>• Focus on return on investment (ROI) on secondary and tertiary prevention</td>
<td>• ROI over long term and outside health sector</td>
</tr>
</tbody>
</table>
Profile of Children’s Coverage, 2009

All Children

53% (Uninsured)
33% (Medicaid)
10% (Other)

Children Below 133% Federal Poverty Level

66% (Uninsured)
17% (ESI)
15% (Medicaid)

Source: HHS ASPE analysis of the 2010 Annual Social and Economic Supplement to the Current Population Survey
Medicaid Enrollees & Expenditures by Enrollment Group, 2004

- **Elderly persons (9%)**
- **Disabled adults (16%)**
- **Parents (27%)**
- **Children (49%)**

**Enrollees (Total, 57 million)**

- **Elderly persons (25%)**
- **Disabled adults (45%)**
- **Parents (12%)**
- **Children (18%)**

**Expenditures (Total, $269 billion)**

Rowland D. *NEJM* 2005:353; 14:1440
Steps to Quality Care

Figure. The Cascade of Voltage Drops From Insurance to Quality Health Care

- Potential to Receive High-Quality Health Care
- 1. Insurance Available
- 2. Enrolled in Insurance
- 3. Providers and Services Covered
- 4. Informed Choice Available
- 5. Consistent Source of Primary Care Available
- 6. Referral Services Accessible
- 7. High-Quality Care Delivered

Quality of Received Care

Eisenberg JM & Power. JAMA 2000:284:2101
Economic Perspective

• Early investment in the well-being and skill formation of disadvantaged children pays off (Heckman JJ. Science. 2006;312:1900-1902).

• Telluride Principles for Investing in Young Children (www.partnershipforsuccess.org)
  – long-term US economic strength and fiscal sustainability depends on a future workforce
  – investing in children is a vital economic growth strategy
D5. Dollars/Financing: Implications

- Need for a consistent base for financing child/adolescent health care
- Financing proposals must consider child financing mechanisms and child benefits
  - EPSDT must incorporate a comprehensive child benefits package
  - Reimbursement for primary care and specialty providers for children must be adequate (Medicaid reimbursement is approx 70% of Medicare reimbursement)
  - Incentives are needed for adult providers caring for complex young adults with pediatric onset conditions
Return on investment evaluation must consider benefits outside the health care system.

A longer time horizon and scope are needed when measuring ROI.

A life course perspective makes sense for research and policy.
<table>
<thead>
<tr>
<th>19th Century</th>
<th>20th Century</th>
<th>21st Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat symptoms</td>
<td>Treat diseases</td>
<td>Predictive Preemptive Participatory Personalized</td>
</tr>
</tbody>
</table>

The Future Paradigm: 4 P’s

- Tolerable
- Intolerable
- Preclinical
- Molecular preemption
- Symptom management
- Cost savings
- Curative treatment

# History of Medical Progress: 9 P’s

<table>
<thead>
<tr>
<th>19th Century</th>
<th>20th Century</th>
<th>21st Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat symptoms</td>
<td>Treat diseases</td>
<td>Predictive, Preemptive, Participatory, Personalized, Pediatrics, Prenatal, Preconception, Population Health, Policy</td>
</tr>
</tbody>
</table>
The Evolution of Health Disparities Research

- **1st Era:** Poverty as Threshold
- **2nd Era:** Gradients
- **3rd Era:** Measurement, mechanisms
- **4th Era:** Multiple Levels of Influence
- **5th Era:** Interactions, Systems, Causality
- **6th Era:** ?? Intervention and Translation to Programs & Policy
NCS Formative Research: Measuring Child Health Disparities

The Healthy Beginnings Study
National Children’s Study

• Aim: To examine the effects of the environment, as broadly defined to include factors such as air, water, diet, sound, family dynamics, community and cultural influences, and genetics on the growth, development, and health of children across the US, following them from before birth until 21 years of age.

• Largest long-term study of children’s health and development ever to be conducted in the U.S.

• Longitudinal study of 100,000 children, their families, and their environment
NCS Formative Study
Measuring Child Health Disparities

Aim 1: To assess content, criterion and construct validity of measures of discrimination, health literacy, acculturation, and health care access, utilization, and quality in diverse populations
Aim 2: To assess the biologic and behavioral responses that place individual children at increased risk for both short-term and long-term poor health outcomes and disease utilizing saliva measurement of stress and inflammatory markers and cotinine in pregnant mothers and mothers and their children.
The Evolution of Health Disparities Research

- 1\textsuperscript{st} Era: Poverty as Threshold
- 2\textsuperscript{nd} Era: Gradients
- 3\textsuperscript{rd} Era: Measurement, mechanisms
- 4\textsuperscript{th} Era: Multiple Levels of Influence
- 5\textsuperscript{th} Era: Interactions, Systems, Causality
- 6\textsuperscript{th} Era: ?? Intervention and Translation to Programs & Policy

Adler & Stewart. Ann NY Acad Sci 2010;1186:5-23
Trajectories: Conceptual Framework Guiding Early Childhood Policy & Practice

Significant Adversity

Healthy Developmental Trajectory

Impaired Health and Development

Supportive Relationships, Stimulating Experiences, Health-Promoting Environments
Protective Interventions

Significant Adversity

New Protective Interventions

Healthy Developmental Trajectory

Supportive Relationships, Stimulating Experiences, Health-Promoting Environments
Effectiveness of a Mentor-Implemented, Violence Prevention Intervention for Assault-Injured Youths Presenting to the Emergency Department: Results of a Randomized Trial

Tina L. Cheng, MD, MPH\textsuperscript{a}, Denise Haynie, PhD, MPH\textsuperscript{b}, Ruth Brenner, MD, MPH\textsuperscript{c}, Joseph L. Wright, MD, MPH\textsuperscript{d}, Shang-en Chung, ScM\textsuperscript{e}, Bruce Simons-Morton, EdD, MPH\textsuperscript{a}

\textsuperscript{a}Department of Pediatrics, Johns Hopkins University, Baltimore, Maryland; \textsuperscript{b}Departments of \textsuperscript{c}Prevention Research and \textsuperscript{d}National Children’s Study Program Office, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Department of Health and Human Services, Bethesda, Maryland; \textsuperscript{e}Child Health Advocacy Institute, Children’s National Medical Center, Washington, DC
Take Charge! 2.0

• Aims:
  – To test the effectiveness of the TakeCharge! 2.0 with assault-injured youth presenting to the emergency department in improving health and educational outcomes
  – To test the cost-effectiveness of TakeCharge! 2.0

• Design: Randomized trial of intervention or limited case management, DC and Baltimore

• Participants: Assault injured youth age 10-15 and their parents/guardians
Take Charge! 2.0

• Intervention through Big Brothers, Big Sisters:
  – Youth “mentoring” and social skills/problem solving curriculum, 6-8 sessions
  – Parent curriculum on parental involvement and monitoring, 3 sessions
  – Linkage to community services
  – Web enhancements

• Measurement:
  – In home face-to-face and audiotape interviews with youth and parent at baseline, 6 and 18 mos

• Health and Education outcomes
Priorities of Low-Income Urban Residents for Interventions to Address the Socio-Economic Determinants of Health

Marion Danis
Namrata Kotwani
Joanne Garrett
Ivonne Rivera

More

Journal of Health Care for the Poor and Underserved, Volume 21, Number 4, November 2010, pp. 1318-1339 (Article)

• 95% Health insurance
• 82% Housing vouchers
• 82% Dental care
• 72% Job training
Priorities of Low-Income Urban Residents for Interventions to Address the Socio-Economic Determinants of Health

Marion Danis
Namrata Kotwani
Joanne Garrett
Ivonne Rivera

More

Journal of Health Care for the Poor and Underserved, Volume 21, Number 4, November 2010, pp. 1318-1339 (Article)

- 95% Health insurance
- 82% Housing vouchers
- 82% Dental care
- 72% Job training

- Quality child care, education & opportunities for their children
- Safe homes & neighborhoods
Healthy Futures Study

TL Cheng, S Lindstrom Johnson, V Jones

- **Aim:** To test the effectiveness of a future orientation motivational interviewing intervention to promote transition to adulthood.
- **Design:** Randomized controlled trial
- **Participants:** Harriet Lane Clinic patients 14-21 yrs
- **Intervention:** 3 MI sessions with “career coach” plus workshops, and email, phone follow-ups
- **Measurement:** Interviews at baseline, 6 and 15 mos
- **Outcomes:** Future orientation, risk behavior, educational and job outcomes
Hypothesized Healthy Futures Pathway

Healthy Futures Intervention → Future Orientation

Future Orientation → Educational & Vocational Outcomes

Future Orientation → Health Outcomes
## Participant Demographics (n=200)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Comparison Participants</th>
<th>Intervention Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Age</strong></td>
<td>16.77 (1.98)</td>
<td>16.59 (2.08)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>38 (38.4%)</td>
<td>42 (41.6%)</td>
</tr>
<tr>
<td>Female</td>
<td>61 (61.6%)</td>
<td>59 (58.4%)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>94 (94.9%)</td>
<td>98 (97.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (5.1%)</td>
<td>3 (3.0%)</td>
</tr>
<tr>
<td><strong>Maternal Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High School</td>
<td>55 (57.9%)</td>
<td>57 (60.6%)</td>
</tr>
<tr>
<td>&gt; High School</td>
<td>40 (42.1%)</td>
<td>37 (39.1%)</td>
</tr>
<tr>
<td><strong>Academic Achievement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly A’s and B’s</td>
<td>56 (57.1%)</td>
<td>62 (61.4%)</td>
</tr>
<tr>
<td>Mostly C’s and D’s</td>
<td>42 (42.9%)</td>
<td>39 (38.6%)</td>
</tr>
</tbody>
</table>
### Preliminary 15 Month Results: Future Orientation Outcomes

<table>
<thead>
<tr>
<th>Future Orientation Outcomes (n=112)</th>
<th>Intent to Treat (Intervention vs Comparison) Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Behaviors and Knowledge</td>
<td>3.01*</td>
</tr>
<tr>
<td>Career Expectancies</td>
<td>3.91**</td>
</tr>
</tbody>
</table>

Adjusted for age and gender  
* p<.05; ** p<.01; *** p<.001
## Preliminary 15 month results: Health Outcomes

<table>
<thead>
<tr>
<th>Health Outcomes (n=112) Negative Binomial Regression</th>
<th>Intent to Treat (Intervention vs. Comparison) Rate Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. fights in past 30 days</td>
<td>.27\textsuperscript{t}</td>
</tr>
<tr>
<td>Damaged property past 30 days</td>
<td>.20\textsuperscript{t}</td>
</tr>
<tr>
<td>No. times used marijuana past 30 days\textsuperscript{a}</td>
<td>.17\textsuperscript{***}</td>
</tr>
</tbody>
</table>

Adjusted for age, gender
\textsuperscript{t} \( p<.10; \) \( * p<.05; \) \( ** p<.01; \) \( *** p<.001 \)
\textsuperscript{a} evidence of mediation by future orientation
A motivational interviewing intervention on future jobs and education can influence future orientation and reduce risk behaviors.

The concept of future orientation may be a modifiable construct and associated with risk behavior.
Proceedings of the Preconception Health and Health Care Clinical, Public Health, and Consumer Workgroup Meetings

June 27-28, 2006
Atlanta, Georgia
Harriet Lane Clinic
New Mother Interviews (N=79)

- Age: 43 (54%) 21 years or younger
- Primary care provider for themselves?
  - 21 (27%) had a primary care provider
- Have insurance after pregnancy?
  - 35 (44%) no insurance
- Planned Pregnancy?
  - 70 (89%) unplanned
- Interest in having their primary care provided by the clinician for their child?
  - 67 (85%) said yes
Preconception Women’s Health in Pediatrics

Aims:

• To assess women’s health care access, reproductive life plan and interest in preconception care (PCC) or primary care by their child’s physician

• To assess the feasibility and effectiveness of PCC provided by pediatric clinicians

• To assess the cost-effectiveness of the model
“A true measure of a nation’s standing is how well it attends to its children – their health and safety, their material security, their education, socialization and their sense of being loved, valued and included in the families and societies into which they were born.”

UNICEF Innocenti Report, 2007