With Every Heartbeat is Life Community Health Worker Cardiovascular Health Initiative

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Purpose of Presentation

• Describe the impact of cardiovascular disease (CVD) on the African American community
• Provide an overview of the NHLBI programs to improve cardiovascular health in the African American community
• Discuss implementation strategies and evaluation tools for each program
Cardiovascular Health Risk

- Heart Disease and Stroke are two significant causes of death for all Americans.
- Heart Disease is the number one cause of death for all minorities except Asians.
- Stroke is the number three cause of death for Blacks.
- Minority groups are making little or no progress in addressing risk factors:
  - Physical activity
  - Overweight and obesity
  - Diabetes
  - High blood pressure
• In 1990, among states participating in the Behavioral Risk Factor Surveillance System, ten states had a prevalence of obesity less than 10% and no states had prevalence equal to or greater than 15%.

• By 1999, no state had prevalence less than 10%, eighteen states had a prevalence of obesity between 20-24%, and no state had prevalence equal to or greater than 25%.

• In 2009, only one state (Colorado) and the District of Columbia had a prevalence of obesity less than 20%. Thirty-three states had a prevalence equal to or greater than 25%; nine of these states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, and West Virginia) had a prevalence of obesity equal to or greater than 30%.
## Body Mass Index (BMI) Chart

<table>
<thead>
<tr>
<th>BMI</th>
<th>Healthy Weight</th>
<th>Overweight</th>
<th>Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19  20  21</td>
<td>22  23</td>
<td>24</td>
</tr>
<tr>
<td>4'10&quot;</td>
<td>91  96  100</td>
<td>105  110</td>
<td>115  119</td>
</tr>
<tr>
<td>5'0&quot;</td>
<td>97  102  107</td>
<td>112  118</td>
<td>123  128</td>
</tr>
<tr>
<td>5'1&quot;</td>
<td>100  106  111</td>
<td>116  122</td>
<td>127  132</td>
</tr>
<tr>
<td>5'2&quot;</td>
<td>104  109  115</td>
<td>120  126</td>
<td>131  136</td>
</tr>
<tr>
<td>5'3&quot;</td>
<td>107  113  118</td>
<td>124  130</td>
<td>135  141</td>
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<td>5'4&quot;</td>
<td>110  116  122</td>
<td>128  134</td>
<td>140  145</td>
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<tr>
<td>5'5&quot;</td>
<td>114  120  126</td>
<td>132  138</td>
<td>144  150</td>
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<td>5'6&quot;</td>
<td>118  124  130</td>
<td>136  142</td>
<td>148  155</td>
</tr>
<tr>
<td>5'7&quot;</td>
<td>121  127  134</td>
<td>140  146</td>
<td>153  159</td>
</tr>
<tr>
<td>5'8&quot;</td>
<td>125  131  138</td>
<td>144  151</td>
<td>158  164</td>
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<td>5'9&quot;</td>
<td>128  135  142</td>
<td>149  155</td>
<td>162  169</td>
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<tr>
<td>5'10&quot;</td>
<td>132  139  146</td>
<td>153  160</td>
<td>167  174</td>
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<tr>
<td>5'11&quot;</td>
<td>136  143  150</td>
<td>157  165</td>
<td>172  179</td>
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<tr>
<td>6'0&quot;</td>
<td>140  147  154</td>
<td>162  169</td>
<td>177  184</td>
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<tr>
<td>6'1&quot;</td>
<td>144  151  159</td>
<td>166  174</td>
<td>182  189</td>
</tr>
<tr>
<td>6'2&quot;</td>
<td>148  155  163</td>
<td>171  179</td>
<td>186  194</td>
</tr>
<tr>
<td>6'3&quot;</td>
<td>152  160  168</td>
<td>176  184</td>
<td>192  200</td>
</tr>
<tr>
<td>6'4&quot;</td>
<td>156  164  172</td>
<td>180  189</td>
<td>197  205</td>
</tr>
</tbody>
</table>
Obesity Trends* Among U.S. Adults
(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)
Affordable and Assisted Housing

• Study of Public Housing Residents in 2004
  – Public housing residents consist largely of minority groups
  – Minority groups are at greater risk of cardiovascular disease
  – HOPE VI survey finds that public housing residents at even greater risk than other members of minority group
There is hope!!!

- Assisted and Affordable Housing Residents can reduce the risk of heart disease by:
  - Understanding the risk factors
  - Becoming or staying physically active
  - Preventing or controlling high blood pressure
  - Losing weight
  - Preventing or controlling diabetes
  - Eating healthy
  - Quitting or never starting smoking
World as it should be…..

“All of us driven by a simple belief that the world as it is just won’t do – that we have an obligation to fight for the world as it should be.” – Michelle Obama
NHLBI With Every Heartbeat is Life Programs

- Address the commitment of the NHLBI to Healthy People 2010
- Provides a culturally sensitive way of reaching the communities
- Draws on the use of the Community Health Worker model
- Promotes capacity and partnership building through use of resources already established in the community
Goals and Objectives of Program

• **Goal:** Increase the utilization of community health workers in addressing cardiovascular health in communities with health disparities.

• **Objectives:**
  – Train and equip Community Health Workers to conduct appropriate heart health education using cardiovascular health curricula and other heart health resources created by the National Heart, Lung and Blood Institute
  
  – Implement activities to promote cardiovascular health by addressing knowledge and behavioral change
  
  – Impetus of address health disparities:
    • Department of Health and Human Service
      – Healthy People 2010's overarching goal of ‘eliminating health disparities’
  
    • NIH’s Strategic Plan on Health Disparities
    
    • NHLBI’s Strategic Plan on Health Disparities
The Role of the National Heart, Lung and Blood Institute

The National Heart, Lung and Blood Institute provides global leadership for a research, training, and education program to promote the prevention and treatment of heart, lung and blood diseases and to enhance the health of all individuals so that they can live longer and more fulfilling lives.*

*Shaping the Future of Research: A Strategic Plan for the National Heart, Lung and Blood Institute

* NHLBI Strategic Plan:
  – 3.1.a. Develop and evaluate proven preventive and lifestyle interventions
  – 3.1.b. Develop and evaluate policy, environmental, and other approaches for use in community settings to encourage and support lifestyle changes
  – 3.1.c. Develop and evaluate interventions to improve patient, provider, and health care system behavior and performance in order to enhance quality of care and health outcomes
Why Community Health Workers?

• Effective in reaching community residents that have been traditionally defined as “Hard to Reach.”

• “Change agents”, healers, extenders of care, “brokers” between community residents and the health care system.

• Educators of patients and families and as trusted members of the community.

• People who are willing to understand the need of the community.

• Able to address social and cultural barriers and to facilitate change while ensuring access to health care services.
Community Health Workers

• Community Health Workers National Workforce Study¹:
  – Community Health Workers function in five models
    • Member of healthcare delivery team
    • Navigator
    • Screening and Health Education Provider
    • Outreach-Enrolling-Informing Agent
    • Organizer

  – Numbers of CHW’s are increasing
    • 85,879 in 2000
    • 121,206 in 2005

NHLBI Community Health Worker Initiative

Building Capacity through training & leadership development

Mobilizing Communities toward an integrated and comprehensive approach to reducing the burden of CVD

Engaging Communities Through partnership development & Community Participatory Planning

Community Health Workers

Systems Approach Linking community education with clinical management
With Every Heartbeat is Life Resources

Manuals

Picture Cards

Recipe Book

Risk Factor Book
With Every Heartbeat is Life

- Comprehensive curriculum created by the National Heart Lung and Blood Institute
- Culturally sensitive and language appropriate
- 10 sessions of cardiovascular health information with two sessions of guidance for implementation
- Integrates hands-on demonstrations, skill-building activities, handouts, heart-healthy recipes, and inspirational quotes by African Americans
Risk Factors for Heart Disease

1. High blood pressure

2. High blood cholesterol

3. Cigarette smoking

4. Diabetes

5. Overweight

6. Physical inactivity
Risk Factors for Diabetes

1. **Overweight**, especially if you have extra weight around the waist

2. **Physically inactive**

3. **Family members** with diabetes

4. Have had **diabetes during pregnancy** (gestational diabetes)

5. **High blood pressure**

6. **Cholesterol levels that are not normal**
Diabetes Symptoms

- Feeling tired
- Increased thirst
- Frequent urination
- Increased hunger
- Unexplained weight loss
- Sores that don’t heal
- Very dry skin
- “Pins and needles” feeling in the feet
- Blurry vision
- Feeling irritable
Three out of Five = Metabolic Syndrome

1. High waist measurement
2. High triglyceride level
3. Low HDL cholesterol level
4. Blood pressure 130/85 mmHg or more
5. Fasting blood glucose higher than 100 mg/dL
Facts About Smoking

• In the United States, about 440,000 people die each year from diseases related to smoking. This is more than 1,200 people each day.

• Smoking causes about 1 in every 5 deaths.

• Health care costs due to smoking are about $75 billion each year in the United States.

• Smokers use tobacco regularly because they become addicted to nicotine, which is a powerful drug. Nicotine is found in all tobacco products.

• Smoking can harm those around you! Cigarette smoking puts the health of your family, children, and friends at risk.
### Implementation and Evaluation Strategies for NHLBI Community Health Worker Programs

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Train-the-trainer: train community members how to use the curricula to delivery heart health messages</td>
<td># and % of changes in knowledge and skills of community health workers</td>
</tr>
<tr>
<td>2. Community Education</td>
<td></td>
</tr>
<tr>
<td>a. Teach manual to community</td>
<td># and % of changes in knowledge, attitude, &amp; behavior</td>
</tr>
<tr>
<td>b. Teach manual + heart health screenings</td>
<td># and % of changes in knowledge, attitude &amp; behavior</td>
</tr>
<tr>
<td>For example: Blood pressure, blood cholesterol, glucose, BMI</td>
<td># and % referred &amp; follow up with provider</td>
</tr>
<tr>
<td>3. Lifestyle and clinical management (Help patients manage risk factors +lifestyle)</td>
<td># and % of changes in KAB; # and % of changes in Clinical values; # and % patients taking meds, and # and % of patients contacted for follow-up</td>
</tr>
</tbody>
</table>
Initiative Partners: 2007 HOPE VI Partners

- 2007 HOPE VI Grant Sites
  - Boston, MA
  - Fayetteville, N.C.
  - New Orleans, LA
  - Phoenix, AZ
  - Washington, D.C.
Initiative Partners:
2008 HOPE VI Partners

- 2008 HOPE VI Grant Sites
  - Bremerton, WA
  - Chicago, IL
  - King County, WA
  - Milwaukee, WI
  - Seattle, WA
  - Texarkana, TX
Initiative Partners:
2008 HOPE VI Partners

• Mid-Atlantic (Durham 6)

  Sites
  – Charlotte, NC
  – Columbia, SC
  – Durham, NC
  – Norfolk, VA
  – Portsmouth, VA
  – Wilmington, NC
Partnering with Resident Organizations

• NHLBI has reached out to Resident Organizations and Housing Authorities to adopt the Community Health Worker Program

• NHLBI has partnered with the National

• Presentations have been given at three Resident Organization meetings:
  – Baltimore, Maryland
  – Springfield, Massachusetts
  – Pigeon Forge, Tennessee
Demographics of Sheridan Terrace

- DCHA (Sheridan Terrace) is located in the nation’s capitol, Washington, DC.
- The original potential caseload for Sheridan Terrace is 270 but currently 110 are enrolled in the CSSP.
- 100% African American/Black.
- Diabetes and High Blood Pressure are the main health issues.
Needs Assessment/Formative Research

• According to initial assessment done on 110 former Sheridan Terrace residents:
  ➢ 23 out of 110 residents had Diabetes; and
  ➢ 45 residents out of 110 had High Blood Pressure.
## Training Sessions in Washington, DC

<table>
<thead>
<tr>
<th>Type of Classes</th>
<th>Days</th>
<th>Time</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train-the Trainer</td>
<td>Thursdays</td>
<td>10:00am-4:00pm</td>
<td>Wheeler Creek Community Center</td>
</tr>
<tr>
<td>Single Sessions</td>
<td>Thursdays</td>
<td>2:00pm-4:00pm</td>
<td>Dwelling Place Senior Center</td>
</tr>
<tr>
<td>Weekly Sessions</td>
<td>Thursdays</td>
<td>1:30pm-4:30pm</td>
<td>Wheeler Creek Community Center/ Host Residents Home</td>
</tr>
</tbody>
</table>
Evaluation

• Twenty-one (21) individuals participated in WEHL training.
• 67% Completion rate.
• 21 completed Pre-test and 14 completed Post-test.
• Reporting: Monthly verbal report, weekly staff meeting with CSSP Administrator and annual written report.
Implementation of a Community Health Worker Program

• Step 1: Introduction and Recruitment of Housing Authorities
• Step 2: Capacity Building and Preparation for Program
• Step 3: Training and Implementation
• Step 4: Evaluation and Maintenance
Step 1: Introduction and Recruitment of Housing Authorities

• NHLDI and HUD will introduce the WEHL program to Housing Authorities through meetings and conferences

• NHLBI and HUD will recruit Housing Authorities that are interested in the program

• NHLBI and HUD will answer questions regarding program and provide resources for improved understanding of the program
Step 2: Capacity Building and Preparation for Program

• NHLBI and HUD will work with Housing Authorities to perform Needs Assessment and Environmental Assessment

• NHLBI and HUD will work with Housing Authorities to build partnerships to conduct program

• Housing Authorities will form partnerships and pursue MOU with local groups to conduct program

• Housing Authorities will recruit residents to be trained to serve as Community Health Workers
Step 3: Training and Implementation

• Recruited Housing Residents will attend and compete a With Every Heartbeat is Life Training

• Trained Housing Residents will return to community to work with Housing Authorities to implement program

• NHLBI and Housing Authorities will work with trained residents

• Trained Residents and partners will conduct education classes and other activities in the community
Step 4: Evaluation and Maintenance

• NHLBI and HUD will work with Housing Authorities and Residents to evaluate the program on a regular basis.

• NHLBI and HUD will work with Housing Authorities and Residents to make changes to the program to improve implementation as necessary.

• NHLBI and HUD will work with Housing Authorities and Residents to report and disseminate findings and
Change

“Change will not come if we wait for some other person or some other time. We are the ones we’ve been waiting for. We are the change that we seek.” – Obama