Wellness Indicators in North Charleston, SC

Joseph Cheng (COM/CGS), Alice Hoang (CDM), Katie Koval (COM), Ebony Merisier (CHP), Lisa Murphy (COP), Amy Painter RN (CON), Andrew Reynolds (CDM), Kate Robinette (Law), Benjamin Smith (CHP), Alice Uflacker (COM), Advisors: Colin Crowe (COM); Michael Kern PhD; Gayenell Magwood PhD, RN; Deborah Williamson DHA, BCCNM; and Lisa Vandemark PhD, RN

Background:

Our study is a contribution to ongoing research with the MUSC College of Nursing with the aim of evaluating the Berkeley, Charleston, and Dorchester communities in order to gain further insights on the various socio-economic and physical environmental factors as social determinants of health. South Carolina state health data suggests there is room for improvement in health indicators such as prevalence of obesity, children’s health, access to health insurance, and public health.

Policy Recommendations

Decreased cost and greater access to fresh foods can be improved in neighborhoods in North Charleston with the addition of farmers’ markets, grocery stores, and affordable healthy alternatives such as having local produce sold by local convenience stores. The Active Neighborhood Checklist can be utilized to assess other communities or schools in the Charleston area to recommend modifications in order to increase inducers and remove barriers to healthy active living.

Major barriers exist that prevent access to comprehensive mental health care at microsystem, mesosystem, and macrosystem levels in North Charleston. There are many resources that can be accessed, mobilized, and focused on specific goals to improve communities.

Having a centralized health director at chosen economic centers, such as schools, would help coordinated efforts between existing resources and providers of care. Planning goal oriented interventions will need the interprofessional teamwork of community members, nonprofit or business leaders, policymakers, and professionals.

Focus: Burns and Chicora Communities

We focused on the Burns and Chicora Communities in “the Neck” area of Charleston as research has shown this area bears a disproportionate share of the region’s air, water, and land based pollution, has negative health outcomes, and a median household income below the city average. Our design was to utilize store observations, active neighborhood safety surveys, and key informant interviews to assess community members’ access to healthy foods, safe environments, and healthcare. We hope our research helps to further inform our community so as to better develop and implement interventions aimed at improving their overall health.

Active Neighborhood Safety Survey

Objective: Quantitatively and qualitatively capture built environmental inhibitors or inducers to healthy active lives.

Methods:

Quantitative data: Urban planning survey in 2 mile radius of Chicora and Burns Elementary school with assistance and training by DHEC.

Qualitative data: Digital photography of urban planning

Presentation to community task force with elicited feedback

Data:

<table>
<thead>
<tr>
<th>Data</th>
<th>Inducers</th>
<th>Inhibitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chichora Elementary</td>
<td>Accessible Playgrounds</td>
<td>Unmaintained sidewalks</td>
</tr>
<tr>
<td>Burns Elementary</td>
<td>Advanced Bar Crosswalk</td>
<td>School zone after school entrance</td>
</tr>
</tbody>
</table>

Conclusions:

There are urban design inhibitors around Chicora and Burns Elementary that if modified can improve accessibility and opportunity for healthy active living choices. The Active Neighborhood Checklist and DHEC are resources communities can access to assess and make recommendations for decreasing inhibitors and increasing inducers of healthy active living.

Key Informant Interviews

Objective: To ask informed members of the community their perspective on barriers to mental health care, indicators of wellness / illness and resources in Berkeley, Charleston, and Dorchester County.

Methods:

Identified key informants using snowball sampling design

Conducted interviews in person or on telephone using IRB approved survey

Compiled content of interviews utilizing the RedCap database

Analyzed data by identifying and organizing comments by response themes

Data and Conclusions:

Gender (15 Female, 3 Male)

Race: (8 African American, 8 Caucasian, 2 Unclassified)

Engaged in Mental Health Field: (13 Yes, 5 No)

Survey Questions | Response Themes
---|---
What are the barriers to mental health care for disadvantaged people in Berkeley, Charleston, and Dorchester Counties? | Homelessness
| Stigma to mental health
| Cultural ideologies
| Lack of governmental support

What resources do disadvantaged people in Berkeley, Charleston, and Dorchester Counties need to promote wellness? | Access to and navigation with healthcare
| Funded support
| Education and outreach

If you were to take a picture of something that promotes wellness in the neighborhood, what would it be? | Sidewalks, community parks
| Park Circle Farmer’s Market
| Building transformation in South N. Charleston

If you were to take a picture of something that promotes illness in your neighborhood, what would it be? | Lack of education for living wage employment
| Poor physical condition of urban buildings

Accessibility and advertising of alcohol were more prominent than that of fresh fruits and vegetables. There is a lack of access to grocery stores or affordable fresh foods within walking distance of both schools.

Active Neighborhood Checklist and DHEC are resources communities can access to assess and make recommendations for decreasing inhibitors and increasing inducers of healthy active living.

2009 United Health Foundation Determinants by State (SC) Value Rank
Prevalence of Obesity (by population) 30.5 % 45
Percent without health insurance 16.1 % 37
Violent Crime (offenses per 100,000) 730 50
Children in Poverty (% under age 18) 19.8 % 33
Public Health Funding (Dollars per person) $82.00 20
Preventable hospitalizations (# per 1000) 70.6 26
State rank by all determinants of health

State rank by all determinants of health