

## Exploring Community Gardens in a Health Disparate Population: Findings from a Mixed Methods Pilot Study

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### What Is the Purpose of This Study?

- The primary aim of this pilot study was to understand opinions and interests in developing and implementing a community garden program in the health disparate Dan River Region, as well as understand factors impacting fruit, vegetable, and gardening behaviors.
- Grounded in theory, this mixed methods study design included qualitative key informant surveys and quantitative surveys with low-income youth and their parents.
- The overall goal was to use this descriptive formative data to inform the community-based participatory research (CBPR) partnership on the viability and logistics related to community garden programs in the Dan River Region.

### What Is the Problem?

- The Dan River Region, which includes the city of Danville, Pittsylvania and Caswell counties, meets the medically underserved area/population classification with high indices of poverty, low educational attainment, and high rates of health disparities and obesity.
- To address concerns related to obesity and health in the region, a CBPR team was formed. At the time of this study, increasing access to healthy food among at-risk youth and their families via community garden efforts had been identified as a top priority by the CBPR team, yet little was known about the interest level of community leaders and members who would most likely be targeted to lead and participate in such efforts.
- There is little published research that describes how formative methods could inform the development and sustainability of community gardens. Furthermore, few studies apply CBPR principles or examine how community partnerships can promote community gardens as a means to increase fruit and vegetable intakes of low-income populations.
- There is a lack of efforts understanding how community gardens may impact multiple levels of influence including individual-level behaviors, social influences, and environmental influences.

### What Are the Findings?

- Although recommendations have been made to apply the CBPR approach to community garden efforts, this is the first known community garden study to apply CBPR principles. Important principles central to CBPR are signified through this study including engagement of community members in identifying problems and solutions as well as conceptualizing and participating in the research process.
- Results from the key informant interviews indicated that stakeholders external to the task force held positive attitudes toward community gardens and identified community gardens as a means to increase community cohesion, physical activity, and nutritional outcomes. Findings strongly support the need for multifaceted interventions that span individual, community, and environment levels within the region.

- Churches, schools, and organizations were identified as prime locations for community gardens, with the most positive responses for church participation. The planning phase of implementing community gardens was thought to be the most time intensive and a lack of resources was shown to be of concern; however, stakeholders were confident of the ability of community gardens to engage community members. Other concerns voiced were lack of leadership, initiation, and sustainability of community gardens.
- Most youth and parents expressed an interest to work in a community garden and also eat the produce they harvest. In general, youth were more willing to try fruits than vegetables. Parents stated they would eat food grown out of a community garden and wished to eat more fruits and vegetables. Overall, there was a higher vegetable availability in the home than fruit availability. Likewise, the variety of vegetables in the home was higher than fruit variety.
- Parent gardening attitudes and beliefs strongly predicted intentions to garden at home with attitudes providing the strongest prediction followed by beliefs. Intentions for community garden engagement was also significant, yet weaker, and indicated that gardening beliefs were most important compared to nonsignificant attitudes. Our findings suggest that intervention efforts to improve attitudes and beliefs about gardening may increase the intention to garden.

#### Who Should Care Most?

- Organizations and stakeholders should be aware that community gardens may be a viable and well-received approach to address issues with access to healthy foods in the Dan River Region, and perhaps other similar health disparate regions.
- Schools, churches, and other community and civic organizations should consider developing community gardens and related educational programming to address the health and well-being of youth and adults involved with their organization.

#### Recommendations for Action

- Community gardens may promote a multitude of health, economic, and community benefits; however, efforts must engage and draw upon the expertise of local community members for initiation, support, and maintenance of such efforts.
- As efforts progress to develop community gardens, it will be important to address key barriers such as concerns of leadership, resources, and sustainability of community garden efforts.
- Policy makers should consider and promote land-use policies that allow dedicated community space to develop, implement, and maintain community gardens.
- Educators and health practitioners should capitalize on community garden efforts as a means to offer educational programs related to the promotion of healthy behaviors, such as nutrition and physical activity.
- Researchers should partner with local communities to help plan programs and lend expertise to evaluate the impacts of community gardens aimed at the individual, social, and environmental levels of influences.
- Funding agencies should consider investing in community gardens and evaluation efforts to fully understand the potential health and economic impacts of community gardens.