

Fit for Life Steps: Results of a Community Walking Intervention in the Rural Mississippi Delta

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PURPOSE

- The purpose of this study was to develop and implement a walking intervention in Hollandale, a rural town in Mississippi, through the use of community-based participatory research (CBPR) methods. Located in the Mississippi Delta, Hollandale has a population that is 83% African-American. Local levels of income, education, and literacy are low in comparison with both state and national averages. The research partnership included people from Hollandale working with others from the U.S. Department of Agriculture (USDA)/Agricultural Research Service (ARS) and from three nearby educational institutions, namely, Alcorn State University, The University of Southern Mississippi, and the Mississippi State University Cooperative Extension Service.
- The walking intervention lasted for 6 months. It focused on improving the physical activity levels and the health of Hollandale residents who joined in walking groups led by local volunteers. The walking group participants also had access to monthly classes in nutrition and physical activity. They engaged in self-monitoring to gauge their level of involvement.
- This study had the following two major aims:
 1. To assess the feasibility of developing and implementing an exercise intervention in Hollandale using a CPBR approach.
 2. To evaluate a number of key physical measures three times—at the study's outset, halfway through the intervention (after 3 months), and at the end of the intervention (after 6 months). These measures were body mass index, or BMI, which provides a measure of body weight status, percentage of body fat, waist circumference, blood pressure, blood glucose, and blood lipid profile.
- A secondary aim of the study was to test the application of two health behavior change theories. One was the social support theory; the other, the transtheoretical model (TTM).

RECOMMENDATIONS FOR POLICY AND PRACTICE

- The authors gleaned several lessons through this work that they believe may apply to other collaborations between community, university, and government partners. One important lesson was the need for ample time for capacity building and the development of an intervention. Another lesson involved the value of offering a number of different avenues for community members' involvement. A third lesson was the need to recognize the limitations of using existing health behavior surveys among members of minority groups.
- Funding agencies must be flexible with CBPR projects. Although such projects do set out to answer a research question, they also involve certain time-consuming tasks that set them apart from traditional research projects. These slow but vital tasks include steps such as building collaborative relationships, creating social change, and developing the research skills of a community. Such accomplishments are hard to measure.

- This intervention revealed an important limitation of CBPR, namely, the challenge of accounting for social, cognitive, and physiologic changes that were likely to be taking place during the prolonged capacity-building phase that took place before the actual start of the intervention. In this project, this capacity-building period lasted nearly two years.

HOW FINDINGS SUPPORT RECOMMENDATIONS

- This research demonstrated that CBPR is a useful approach in a poor, largely African-American community. Community members meaningfully helped to assess the target problem, identify and plan the intervention, and collect and evaluate data.
- During a two-part workshop, community members began contributing their ideas regarding the nature of the key problems, the causes of those problems, and the kinds of activities that might best solve them. One key problem that emerged was inadequate physical activity. Causes included lack of local role models for activity, lack of will power and self-esteem, and lack of physical activity education and trainers. Through this workshop, a clearer picture emerged of the community's nutrition and health priorities. This in turn led to the creation of a walking trail and to the 6-month walking intervention.
- After the intervention, participants showed significant improvements in measures of waist circumference, systolic blood pressure, and high-density lipoprotein (HDL) cholesterol. Fifty-seven percent of the participants reported an improvement in their intentions and activities related to increased walking. No significant positive changes occurred in the other behavior theory variables such as social support and self-efficacy.
- All parties involved in the long process of developing and implementing this walking intervention in Hollandale viewed the project as a success. Members of the local community actively contributed to each phase of the research. They applied basic research components and formed sustainable partnerships. Furthermore, those who walked significantly improved their health status as indicated by several key biological measures.

Zoellner J, Connell C, Santell R, et al. Fit for life steps: Results of a community walking intervention in the rural Mississippi Delta. *Progress Community Health Partnerships*. 2007; 1: forthcoming. The Community Policy Brief is intended to inform community based organizations, public health policy makers, and other individuals whose primary interest is not research, but who would be interested in the application and translation of research findings for practical purposes.