

Community Health and the Built Environment Project: The Role of Context in Community Interventions

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Background

- Chronic diseases are the leading cause of death and disability worldwide^{1,2}.
- Recent research suggests that chronic disease prevention (CDP) and obesity reduction (OR) interventions should be aimed at the major risk factors and the environmental, economic, social and behavioural determinants in the population^{1,3,4}.
- Ecological studies of lifestyle-related interventions continue to suggest that understanding context (i.e., place) is critical for ecological interventions for health⁵⁻⁸.
- Context may support or inhibit health promoting behaviors and intervention success.

Objective

- To collaboratively develop, implement and evaluate community interventions on access to physical activity (PA) and healthy eating (HE) opportunities.

Methods

Community-Based Participatory Research (CBPR):

- Engages community members, practitioners, and decision-makers as partners in the conduct of research.
- Collaborative research approach designed to ensure participation by communities affected by the issue being studied in all aspects of the research process to improve health and well-being through action and social change.

Setting:

- 2 urban communities and 2 rural communities in Alberta.

Unique Approach:

- Partnered with key community representatives to form Community Working Groups (CWGs) in each of the four communities.
- The CWGs work with the researchers to initiate community-driven, evidence-based projects that address opportunities and barriers to healthy choices.

Analysis and Results

- Each project has community-specific goals, thus appropriate outcomes and methods for project evaluations are determined in consultation with the CWGs.
- An example of a community project will be presented in the following sections to highlight some of the strengths and weaknesses of using the CBPR approach.



COMMUNITY HEALTH & THE BUILT ENVIRONMENT

Community Case Study

St. Paul MOVES (Motivation-Opportunity-Variety-Enjoy-Success)



- Goals are to:
 - promote unstructured play in the community;
 - change perceptions of community safety; and
 - promote underutilized community recreation spaces
- Project implemented in six phases:
 - **Phase 1** (February-June 2009): Partnerships developed with local high schools to have high school students earn credit for researching, developing, planning and implementing unstructured activities (or free play) with elementary children.
 - **Phase 2** (July-August 2009): Through community partnerships high school students were hired for two months over the summer of 2009 to lead unstructured free play activities at local playground spaces.
 - **Phase 3** (September 2009-June 2010): Youth volunteers will lead unstructured free play activities at key community events.
 - **Phase 4** (September 2009-June 2010): By partnering with the local school councils the community working groups will work with parents to understand parental perceptions of unstructured free play and how it can be promoted throughout the community. The results will be used to enhance the final phases of the project.
 - **Phase 5** (May 2010-August 2010): Through community partnerships youth leaders will be hired over the summer months to lead unstructured free play activities at local playgrounds and at community events. This phase will integrate community feedback from Phase 4 and build on the pilot project from the previous summer.
 - **Phase 6:** Through community engagement and buy-in it is anticipated that the project will be sustainable at the community level.



Strengths and Limitations

- **Strengths:** All of the community projects are designed, implemented and evaluated by our community partners. This process helps to ensure the continued sustainability of these projects as they are meaningful to the community.
- **Weakness:** Intervention results may lack external validity due to the specificity of the community projects.

Conclusions

- The study results are practice-relevant as they will facilitate identification of contextual factors that may foster, inhibit or prevent the success of interventions aimed at improving health outcomes
- Working collaboratively with key community stakeholders through the CWGs provides a unique and valuable opportunity to tailor community interventions to meet community needs while still seeking to understand access to PA and HE in communities.
- It is anticipated that by ensuring that the community projects are community-driven that there will be increased opportunities for sustainability.

Implications

- The outcomes of the community projects will be presented to the communities and local decision-makers to ensure that future prevention initiatives and policies, including improvements to community environments, are synergistic with community interests.

References

1. World Health Organization (2009). Integrated chronic disease prevention and control. Accessed July 29, 2009, from http://www.who.int/chp/about/integrated_cd/en/
2. Yach, D., Hawkes, C., Gould, L., & Hofman, K. J. (2004). The global burden of chronic diseases: Overcoming impediments to prevention and control. *The Journal of the American Medical Association*, 291(21), 2616-2622.
3. Catford, J. (2007). Chronic disease: Preventing the world's next tidal wave - the challenge for Canada 2007? *Health Promotion International*, 22(1), 1-3.
4. Fang, R., & Millar, J.S. (2009). Canada's global position in life expectancy: A longitudinal comparison with the healthiest countries in the world. *Canadian Journal of Public Health*, 100(1), 9-13.
5. Ball, K., & Crawford, D. (2005). The role of socio-cultural factors in the obesity epidemic. In D Crawford & RW Jeffrey (Eds), *Obesity prevention and Public Health*, Oxford University Press.
6. Brownson, R.C., Baker, E.A., Housemann, R.A., Brennan, L.K., & Bacak, S.J. (2001). Environmental and policy determinants of physical activity in the United States. *American Journal of Public Health*, 91, 1995-2003.
7. Humpel, N., Owen, N., & Leslie, E. (2002). How the environment shapes physical activity: A transdisciplinary research agenda. *American Journal of Preventative Medicine*, 22(3), 188-199.
8. Raine, K. (2005). Determinants of healthy eating in Canada: an overview and synthesis. *Canadian Journal of Public Health*, 96(3), S8-S14.

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