

THE OTTAWA NEIGHBOURHOOD STUDY

ABOUT THE PROJECT

This project was originally the CIHR funded study (#79238) titled “Tools to investigate the relationship between spatial disparities and their relationship to health disparities”. This pilot project was designed to better define Ottawa neighbourhoods and measure and map neighbourhood social determinants of health amenable to policy interventions. The project began with neighbourhood definition, done in an iterative fashion, combining the physical boundaries and functional approaches, real estate maps, community team member knowledge, and city planning department knowledge. Neighbourhoods were aggregated from dissemination area geography. Contextual and compositional indicators of social determinants of health were obtained from the 2001 Canadian Census, DMTI Enhanced Points of Interest, the City of Ottawa, and the National Capital Commission; co-investigators from Ottawa Public Health assembled a set of health outcomes. All indicators were grouped by neighbourhood. We developed a unique and effective knowledge transfer tool; the neighbourhood profile (attached). Our work has been extremely well received, and we have already shared knowledge through presentations, meetings and our project website, which features the neighbourhood profiles and maps (www.neighbourhoodstudy.ca). Additional community funding allowed us to refine our neighbourhood definitions (94 neighbourhoods in Ottawa; 89 are inhabited), update our data to include the 2006 Census and many new health indicators, and finalize 89 neighbourhood profiles. We have produced a very comprehensive dataset on area exposures (47 contextual and compositional indicators), and health outcomes (20). We are now undertaking multilevel analyses linking theoretically plausible indicators to specific health outcomes. The purpose of this proposal is to request funding for further knowledge translation of this unique and policy relevant information.

THE IMPORTANCE OF THE STUDY IN THE CONTEXT OF THE INTERNATIONAL LITERATURE.

Contextual research is increasingly important in population health as evidence mounts that the neighbourhoods and communities in which we live may have important impacts on our physical, mental, and social health. Three reviews of multilevel studies have found that residence in poorer neighbourhoods is related to mortality, poor self-rated health, and cardiovascular disease/risk factors (2:3), low birth weight (2; 4), and child behavior problems (4). However, the 3 review authors all noted that many extant studies have shortcomings, including lack of theory, lack of precision in measuring context (most studies use limited and non-specific indicators such as area SES), use of census tracts rather than natural neighbourhoods, and lack of appropriate analyses. Our study has overcome many limitations of previous work. We have gone beyond the use of census tracts in our neighbourhood definition. Our comprehensive set of indicators was selected based on their theoretical or empirical relationship to health outcomes; they provide a great deal of specificity in describing neighbourhood exposures. Finally, our analyses respond to Riva's (3) call for research that will „conceptualize, operationalize and measure relationships between specific health outcomes and specific area exposure. Peer reviewed publications resulting from this study will be important contributions to the international literature on place and health.

STRENGTH OF THE EVIDENCE SUPPORTING RELIABILITY AND VALIDITY.

Neighbourhood definition and indicator selection were carefully done and theoretically based. Contextual data from commercial sources was independently verified through web research, telephone calls, and visits to the area. Our age and sex standardized neighbourhood socio-economic index has an internal consistency of .89. Health data was assembled by epidemiologists at Ottawa Public Health from highly reliable and validated municipal and federal surveys and administrative health records, and we are taking appropriate precautions in reporting this data, especially when confidence intervals are wide. To ensure

analytic precision, we are undertaking multi-level analyses in collaboration with a Statistics Canada methodologist.

THE DEGREE OF GENERALIZABILITY OF THE RESEARCH RESULTS.

The results of this research are extremely important. The profiles and all results are generalizable to the greater Ottawa area, which is the primary focus for our knowledge translation. The findings on the socio-economic distribution of resources for health, and of our multilevel analyses will be important to literature on place and health and may point the way to interventions to improve both the social determinants of health and health within Canada and elsewhere. Furthermore, our partnership, our methods, and our findings can serve as a model and a stimulus for other municipalities and university researchers. Epidemiologists in other municipalities in Ontario are interested in doing similar work. The Champlain Local Health Integration Network has expressed interest in working with our team to expand this study to the entire catchment area.

THE MAGNITUDE OF THE POTENTIAL IMPACT.

Despite limited resources, ONS has demonstrated success in knowledge exchange; we can do much more with additional funding. The study has led/contributed to an explosion of interest in neighbourhood and health in Ottawa. The profiles are extremely relevant and useful as they focus on the social determinants of health and highlight neighbourhood strengths and needs. The Ottawa Public Library Ottawa Room often refers students and other researchers to our website. The United Way used our work to help drive its neighbourhoods agenda and to determine where to invest and support community building efforts. Neighbourhood profiles are being used by Community Health and Resource Centres (CHRC) and to the Local Health Integration Network for strategic planning, health planning (gaps in service relative to need), community engagement, and proposal writing (see letters of support). CHRCs have also developed and adopted a community action strategy (No Community Left Behind: www.nocommunityleftbehind.ca) to mobilize residents to

develop innovative solutions to issues they identified; one NCLB community has already realized changes: new playgrounds, reduced gang activity, safer streets, and rejuvenated community association. This success moved the City of Ottawa to set strategic priorities for community development, identify 4 target communities for change (using ONS data), and create a policy framework to support focused activity (Community Development Framework: <http://www.ottawa.ca/residents/cdf>: see attached letter of support). Further funding will allow new results to be shared with these and other key stakeholders. The potential impact is huge as decisions that these stakeholders make impact directly on social determinants of health and on health and social service delivery. Importantly, our work was written up in the Spring 2008 edition of Your Health Research Dollars at Work; <http://www.cihr-irsc.gc.ca/e/36452.html>

*For more information visit:
www.neighbourhoodstudy.ca*

