Conceptualizing Neighbourhood for Population Health Research

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Purpose

• Introduction
• Conceptual issues:
  – Use of administrative areas
  – Resident experience
  – Composition and context
  – Mobility and migration
• Latest research
• Conclusion
Introduction

- Multiple levels of influence on health, including the areas in which people live
- **Neighbourhood**: a person’s immediate residential environment
- Efforts to decrease health disparities are increasingly focused on neighbourhood
- Greater population health improvements may be achieved with more focus on place/neighbourhood
Conceptual issues

• Conceptual models of neighbourhood are required for neighbourhood and health research
• Debate surrounding conception and measurement of neighbourhoods
• Neighbourhood effects on health may be underrepresented due to errors/issues with conceptual models
Use of administrative areas

- Imposed, irregular boundaries which hold little meaning and are inconsistent
- Creates difficulty with creating definition of neighbourhood to best fit research question and study outcomes, which may limit identification of processes and factors which affect health
- Does not align with what residents view as their neighbourhood
Resident experience

• Mismatch between resident and researcher perception can result in measurement error
• Many people define their neighbourhoods in terms of nearby people
• Residents experience their neighbourhoods differently, dependent on education, income, age, and level of community engagement
Composition and context

- **Compositional** explanation: clustering of shared characteristics of residents → health outcomes (ex. Census data)
- **Contextual** explanation: characteristics of the environment → health outcomes (ex. Infrastructure, resources, and social ties)
  - Early neighbourhood research created these explanations as mutually exclusive

- Context often under-conceptualized
- Contextual factors not geographically restricted to “traditional” neighbourhoods
Mobility and migration

- Neighbourhoods change over time
- Most people will live in many neighbourhoods
- Most existing research is cross-sectional
- Daily mobility is a driver of social inequalities
  - Ex. Physical activity does not necessarily take place in one’s own neighbourhood (Rodriguez et al., 2005)
New research

- Research charting individual movement

- Conceptual models linking mobility potential, mobility patterns and contextual effect on inequalities in health (Shareck et al., 2014)

- Systematic social observation (Schaefer-McDaniel et al., 2010)

- GIS to map resident drawn neighbourhoods (Coulton et al., 2013)
Conclusion

• Many models and approaches to investigating neighbourhood and health exist in the literature

• Many conceptual issues to consider

• Researchers must choose concept of neighbourhood to best address research question and be explicit about limitations/assumptions
References


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References


