Micropolitan Health:

Contextual barriers and facilitators to implementing evidence-based public health interventions in midsize rural towns

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Background

- Rural residents experience substantial disparities in physical activity and obesity relative to urban residents.[1]
- Micropolitan communities (rural towns with 10,000-50,000 people) are home to the 61% of rural residents nationwide.[2]
- Unique contextual characteristics of micropolitan areas compared to other rural areas:
  - Greater population density
  - More concentrated institutional resources
  - Slower recovery from the Great Recession[3]
  - Faster increase in racial/ethnic and immigrant diversity[4]
- Implementing evidence-based interventions (EBIs) for health and health equity in micropolitan areas requires adaptation to their specific context.

Methods

This study emerged from a community-based participatory research partnership in a micropolitan community in Iowa.

Community Advisory Board of Active Ottumwa

A Community Advisory Board (CAB) of ten community leaders informed the adaptation and implementation of a lay health advisor intervention to promote physical activity.[5]

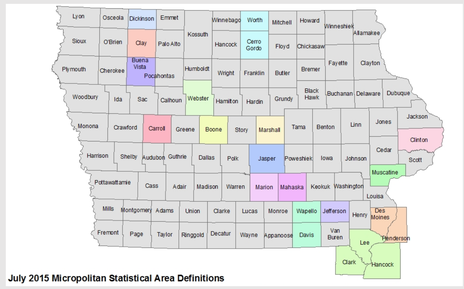
In preparation for the dissemination of the intervention to other micropolitan communities, CAB member perspectives and lessons learned from the intervention were complemented by a systematic examination of contextual barriers and facilitators to EBI implementation in each of Iowa's 17 micropolitan communities.

Data sources:
- American Community Survey
- Robert Wood Johnson Foundation County Health Rankings
- Chamber of Commerce annual reports
- Rural-Urban Commuting Area classifications
- Directories of community agencies such as YMCAs and local foundations.

Findings

Community characteristics, Iowa micropolitan statistical areas, 2018 (n=17)

	Mean (SD)	Range	
		Minimum	Maximum
County Population	31374 (10510)	16478	47972
% Poverty	12.7 (3.0)	6.9	17.5
County Health Ranking Percentile (IA counties)			
Health Outcomes (e.g. life expectancy, low birthweight)	41 (26)	3	79
Health Factors (e.g. health behaviors, social/economic factors)	40 (31)	1	88
School District ranking percentile (out of all Iowa counties)	31 (30)	2	96
Racial/ethnic composition			
% Non-Hispanic White	88.0 (9.3)	62.6	96.4
% Non-Hispanic Black	2.2 (1.6)	0.3	5.7
% Hispanic	6.4 (7.2)	1.7	24.7
Nativity (% foreign-born)	4.5 (5.1)	0.9	17.7
	N	%	
Top employers			
Agricultural processing	6		35%
Manufacturing	5		29%
Health care	3		18%
Other	3		18%
RUCA Commuting classification			
4: primary flow within micropolitan cluster	12		71%
5: primary flow to a large urban center	3		18%
7: primary flow within a small town	2		12%
Community resources			
YMCA	12		71%
Workforce development office	10		59%
Federally Qualified Healthcare Center	8		47%
Local community foundation	10		59%
Community college	17		100%
Community Action Agency office	17		100%



Micropolitan statistical areas in Iowa.
(Iowa State University, Iowa Community Indicators Program)

Iowa's micropolitan communities have higher poverty rates than the state average and tend to face challenges related to the social determinants of health.

Four of Iowa's micropolitan areas are "new destinations" for growing immigrant and refugee populations.

Many of Iowa's micropolitan economies rely on industries that are facing challenges in rural areas, such as manufacturing and health care.

Most of Iowa's micropolitan areas are primary commuting destinations. This means micropolitan residents (and those from surrounding rural areas) tend to stay in the area for work, as opposed to commuting to another urban center.

While many local public health departments in micropolitan areas face limited resources, Iowa's micropolitan communities have many other resources that could be leveraged for health and health equity.

Discussion

- Implementing EBIs in micropolitan areas will require adaptation to their unique social and geographic context.
- In some settings, EBIs may require linguistic and cultural adaptation to promote health equity in increasingly diverse communities.
- Nearly all micropolitan communities are the primary commuting destination for work, retail and services for the surrounding rural areas, meaning EBIs implemented in micropolitan towns may reach other rural residents.
- Collaborative, multi-sector approaches such as Community Health Coalitions could be a promising strategy in the micropolitan context.
- Community-based participatory research can leverage local knowledge for adapting and implementing EBIs for public health in new settings.[5,6]

References

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