An Academic-Community Outreach Partnership: Building Relationships and Capacity to Address Childhood Lead Poisoning

Rosemary M. Caron, PhD, MPH
Associate Professor
University of New Hampshire
College of Health and Human Services
Dept. Health Management and Policy
Master of Public Health Program
Durham, New Hampshire
One City’s Tale…

I. Pediatric fatality in an African refugee child

II. Building an academic-community partnership; CBPR

III. CLP as a Wicked problem
   a. Latina Mothers
   b. Quality improvement screening tool

IV. Environmental inequality
   a. The perfect storm?
   b. Is a moratorium the answer?

V. Conclusions and future work

VI. Acknowledgments
Learning Objectives

1. Describe the impact refugee resettlement can have on a resource constrained community.

2. Describe the importance of how considering a community’s ecology can affect environmental communication efforts pertaining to childhood lead poisoning.

3. Describe at least one method by which a health practitioner can carry out the public health mission for refugee populations in economically challenging times.
Manchester
Why Study Childhood Lead Poisoning (CLP)?
Neighborhoods and Health: Place Matters

Photos Courtesy of the MHD
Neighborhoods and Health: Place Matters

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Pediatric Fatality

- 2 y/o Sudanese refugee child
- Action level = 10 µg/dl
- 391 µg/dl; 72 µg/dl
- EPA investigation
- Property manager fined $40,000 and served a 15 month federal prison sentence
- Lawsuit settled in 2003 for $700,000
Faces of this Public Health Problem

PORTAIT OF LOSS: The death of her little daughter, newly arrived in America where she was supposed to live a long and safe life, is a heavy burden for her mother, Mary Alorout Kuol. Health officials say Sunday Abek’s death was probably caused by the deteriorated lead paint at her Manchester, NH, apartment.

Journal Photo / JOHN FREIDAH

GRIEF-STRICKEN: Mary Alorout Kuol mourns her daughter, Sunday Abek, who died of lead poisoning early last spring when she was just 2, while friends, including Adhol Akot, right, and family within the Sudanese community gather around her bed and, with their prayers, try to offer her some solace.

Journal Photo / JOHN FREIDAH

The Providence Journal
When Something Wicked This Way Comes

- Wicked problems are **multi-factorial** in nature and possess no clear resolution due to numerous **community stakeholder involvement**.

- Often, there are multiple stakeholders who define the problem differently and who possess **uncoordinated solutions**.
CLP as a Wicked Problem

- **Major stakeholders**: residents of poor quality housing, local city health dept., housing agencies, city building inspectors, realtors, childcare providers, health care community, etc.

- CLP is **socially complex**, viewed as responsibility of **multiple stakeholders**; requires behavior change at the **individual** and **organizational level**.
CLP as a Wicked Problem

• People’s concerns regarding basic needs for food, shelter, and clothing outweigh their concerns over exposure to any environmental hazard

• Poverty reduces choice.
Building an Academic-Community Outreach Partnership to Address a Public Health Issue

• Manchester, New Hampshire Health Department (MHD)
• Greater Manchester Partners Against Childhood Lead Poisoning (GMPALP)
• Dartmouth Toxic Metals Research Program’s Community Outreach Group
• Manchester-Dartmouth Partnership for Health
Building an Academic-Community Outreach Partnership to Address a Public Health Issue

- NIEHS SBRP funding
- Community-Based Participatory Research (CBPR)
- Childhood Lead Screening Initiative
Community Ecology and Capacity Building

- **Focus groups with Latina Mothers** (n=15): perception of illness; knowledge of lead poisoning; preferred communication methods regarding an environmental hazard; and feedback on existing CLP prevention materials.
Community Ecology and Capacity Building

- **Focus groups with Latina Mothers:**
  - Aware homes posed a risk to children
  - Concern for household chemicals
  - “I don’t even know how you get lead so I can’t give an opinion.” (Maria, Latina Mother)
  - Word of mouth via their community
  - Need cultural competent materials
Community Ecology and Capacity Building

• Practitioners need to consider a community’s ecology and the social context of risk as it pertains to all types of wicked problems, as these factors will influence the management of the wicked problem and how a diverse community interprets and responds to educational messages and community capacity building efforts.
Place-based Strategy

“...First, lead exposure may be reduced via place-based strategies facilitated by the spatial concentration of certain groups, which can lead to the sharing of information about health risks, prevention and screening. Second, screening activity and the dissemination of information about lead hazards may reflect local knowledge of where poisoned children have been located before...”

Collaborators as Co-Learners: A Productive Tension

• “Call to Action Meeting”
• Community-driven priority: “engaging health professionals to ensure that all Manchester children are screened for lead poisoning and treated as early as possible”
• Dartmouth – “best practice”
• MHD and GMPALP – “service delivery”
Product of an Academic-Community Outreach Collaboration

- Barriers to childhood lead poisoning
- Systems issues
- Quality Improvement Toolkit for Childhood Lead Poisoning
  - Grand Rounds-style lectures
  - Self-administered chart audit
  - Supplemental resources
Lessons Learned

Adaptability, consistency, shared authority and trust are values common to CBPR and community-based partnerships

- Adaptability
- Consistency over time
- Shared authority
- Trust
Sustainability for an Academic-Community Partnership

• Due to capacity-building and web of partners
• City of Manchester awarded HUD funding and hired Lead Coordinator
• Dartmouth group, GMPALP members serve on NH Lead Study Commission
• New lead contractor/renovator trainings funded by Dartmouth are offered on fee-basis by local contractor
Conclusions

- Developing, implementing, and evaluating a participatory process that is grounded in the refugees’ culture, the community’s ecology, and the agencies’ mission and resources so that all voices contribute to a feasible and effective method that results in a decrease in CLP for an at-risk population.
Future Work

• The politics of a moratorium on refugee resettlement: Role for the public health system in assuring the health of the community’s most diverse newcomers by utilizing CBPR.
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Contact Information

Rosemary M. Caron, PhD, MPH
Associate Professor
University of New Hampshire
College of Health and Human Services
Department of Health Management and Policy
E-mail: Rosemary.Caron@unh.edu
Phone: (603) 862-3653