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Findings from the Series of Workshops "In Whose Backyard?—Exploring Toxic Legacies in Mi'kmaw and African Nova Scotian Communities"

Ingrid R.G. Waldron

ABSTRACT

Currently, Mi'kmaw (Aboriginal) and African Nova Scotian communities throughout Nova Scotia, Canada experience disproportional effects of climate change, water contamination, waste disposition, and pollution from the nearby industries. Environmental health equity research findings show differential impacts of toxic facilities and other environmental hazards on health based on race and income. This results in significantly greater health risks for these communities relative to other communities that live in less exposed areas. The Environmental Noxiousness, Racial Inequities and Community Health (ENRICH) project was borne out of an interest in addressing the concerns that Mi'kmaw and African Nova Scotian communities share about the health effects of living near to toxic facilities and other environmental hazards. A series of workshops was held throughout Nova Scotia from September 2013 to January 2014 to discuss these concerns. The main purpose of these workshops was to identify residents' main concerns about the health effects associated with their proximity to toxic facilities and other environmental hazards and to obtain their suggestions for how a future research study could support advocacy efforts around environmental injustices in their communities. The workshop sessions included topics on past, current, and future advocacy efforts and community-based participatory action research. Outcomes from the workshops include consultations with key government departments, a workshop report, a documentary film, as well as communication resources for mobilizing the wider community, such as a project newsletter, a project website, Facebook, television, newspapers, radio, and community meetings.

INTRODUCTION

THERE IS A LIMITED Canadian-based research on the health effects associated with environmental injustices. Environmental health equity research findings show differential impacts of pollution and environmental degradation on health based on race and income. The indirect effect of environmental changes on cultural communities is due to waterborne, food-borne, and vector-borne diseases. These health outcomes are associated with the displacement of people and their livelihoods in hazardous areas. Environmental health equity across racial dimensions is assessed in the literature by showing that racialized com-

communities.

Currently, Aboriginal and other vulnerable communities in Canada experience disproportional effects of climate change, water contamination, waste disposition, toxins, and pollution from the nearby toxic facilities. These include industries such as landfills, industrial power generation stations, incinerators, sewage treatment plants, factories, refineries, pulp and paper mills, oil/gas extraction, and

munities are spatially clustered around areas with greater toxicity. This results in significantly greater health risks for

these communities relative to other communities that live in

less exposed areas. For example, U.S.-based research on

environmental health disparities found that environmen-

tal pollutants were clustered in vulnerable communities.³

The environmental justice movement emerged to challenge

the unfair distribution of toxic and dangerous waste facili-

ties, disproportionately located in low-income racialized

hazardous waste storage.

Dr. Waldron is an assistant professor at the School of Nursing, Faculty of Health Professions, at Dalhousie University in Halifax, Nova Scotia, Canada.

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Racialized communities are exposed to a greater than average amount of toxins since they are more likely to reside near and be employed by mining and forestry industries. 4-6 Although there is no data on the health effects of the first-generation landfill in the African Nova Scotian community of Lincolnville, many of its residents believe that high rates of cancer in the community can be linked directly to that landfill. Aboriginal communities are often located in close proximity to landfills because of the government's removal of environmental protection requirements.⁵ Consequently, these communities face significant environmental problems due to pollution from traffic and nearby industrial waste disposing. Many Aboriginal communities dispose of solid waste on their own lands due to lack of funding and infrastructure, as well their residence in remote regions with improper household disposal systems.⁸ Since many of the solid waste landfills have become potentially hazardous, drinking water is often contaminated, leading to the transmission of disease.8 All of these factors threaten the health and well-being of Aboriginal and other racialized communities. 4,5,9,10

Many argue that the siting of toxic facilities near to these communities is yet another form of racism.11 The Environmental Noxiousness, Racial Inequities and Community Health (ENRICH) project was borne out of an interest in addressing the concerns that Aboriginal (particularly Mi'kmaw) and African Nova Scotian communities have about the health effects of living close to toxic facilities and other environmental hazards. The ENRICH project team held a series of workshops from September 2013 to January 2014 that brought together diverse stakeholders to address environmental injustices in these communities. These stakeholders included faculty/researchers, community members and activists, health professionals, environmental professionals, government, community-based agencies, and university students. The main purpose of these workshops was to identify residents' concerns and priorities about the health effects associated with their proximity to toxic facilities and to obtain suggestions and guidance from residents about if or how a future research study could support ongoing and new advocacy efforts around the removal or re-direction of these sites.

METHODS

Workshop planning

A series of five workshops entitled "In Whose Back-yard?—Exploring Toxic Legacies in Mi'kmaw and African Nova Scotian Communities" was held between September 2013 and January 2014 in several regions across Nova Scotia, including Sunnyville, North Preston, Yarmouth, Membertou, and Halifax. The workshop that was held in Sunnyville on September 28, 2013 brought out African Nova Scotian residents from Lincolnville, Upper Big Tracadie, and Sunnyville. The North Preston workshop that was held on October 5, 2013 brought out African Nova Scotian residents from East Preston, Cherrybrook, Lake Loon, and North Preston. The workshop that was held in Yarmouth on October 19, 2013 was attended by Mi'kmaw residents of Acadia First Nation.

The Membertou workshop that was held on November 23, 2013 was attended by Mi'kmaw residents from Eskasoni and Membertou. The final workshop was held in Halifax on January 11, 2014 and brought out Mi'kmaw and African Nova Scotian residents in Halifax Regional Municipality (HRM) and surrounding areas.

The ENRICH project team (faculty/researchers, research assistants, advisory committee members) were involved in planning the workshops in collaboration with Pink Dog Productions, a video production company that, in addition to overseeing workshop planning activities, produced a documentary film based on interviews and footage from the workshops.

One of the main challenges that arose during the planning process for the workshops was balancing the demands of academia with the priorities and concerns of community in ways that maintained the integrity of the project as a community-based one. For example, the often rigid deadlines in academia often require faculty to complete certain activities within time constraints that do not take into account community members' own timelines and cultural realities. While projects carried out in the true spirit of a community-based approach require that the needs and priorities of community members must come first, academic institutions have yet to fully acknowledge and validate community-based projects, leaving faculty "between a rock and a hard place" when it comes to satisfying the priorities and demands of community and those of academia.

RESULTS

The main objectives of the workshops were to identify residents' concerns about the health effects associated with their community's proximity to toxic facilities and other environmental hazards, to discuss how residents have advocated around the removal or re-direction of these sites and to obtain suggestions about how research could support ongoing and new advocacy efforts.

A total of 121 individuals attended five workshops. Preparations for the workshops got underway in June 2013 and involved hiring workshop organizers from the Mi'kmaw and African Nova Scotian communities in each region; hiring a filmmaker, entertainers, hosts, keynote speakers, facilitators and caterers; promotion; and outreach to community members. The workshops in Lincolnville, North Preston, Yarmouth, and Membertou took place over three hours on a Saturday from September to November 2013. The final convergence workshop in Halifax took place on January 11, 2014 and comprised of two segments: a morning meeting that lasted three hours and engaged residents in HRM, followed by a final fivehour convergence workshop in the afternoon that engaged residents in all regions and consisted of two facilitated break-out sessions. All of the workshop discussions were facilitated by members of the project team, as well as trained facilitators who took participants through a series of prepared questions. Digital recorders and video were used to document workshop discussions and events respectively. The data were used later to produce a workshop report and documentary film.

Session overview

The Sunnyville workshop was held at the Sunnyville Community Hall on September 28, 2013 and focused on the concerns of African Nova Scotian residents in Sunnyville, Lincolnville, and Upper Big Tracadie. These concerns include water contamination due to leaking from the first generation landfill; the opening of a second-generation landfill in 2006 at the site of the old dump; toxins in the soil; poor air quality; and high rates of cancer and other illnesses in the community, which residents believe are linked to the landfill.

The workshop that was held at the North Preston Community Center in North Preston on October 5, 2013 engaged African Nova Scotian residents in North Preston, East Preston, Cherry Brook, and Lake Loon. Participants at this workshop shared their concerns about the following: water contamination, including arsenic in the wells; a waste disposal site near to the North Preston Community Center; exposure of children to water contamination and air pollution; a proposed project to install wind turbines in the community; and high rates of certain illnesses in the community, including cancer, diabetes, heart disease, asthma, and skin problems.

The Yarmouth workshop was held at the Rodd Grand Yarmouth Hotel on October 19, 2013 and focused on the following concerns of Mi'kmaw residents of Acadia First Nation: a salvage yard (junk yard) underneath the reserve that has been used as a dumping ground for abandoned car parts for over 60 years; diesel fluid dumped into an area on the Yarmouth Reserve; arsenic in the water at the Gold River Reserve; black mould growing around windows and other areas in homes; vegetables growing in toxic soil; exposure of children to toxic land; wind turbines in Pubnico that may be associated with high rates of cancer; and high rates of certain illnesses in the community, including cancer, allergies, and asthma.

The Membertou workshop was held at the Membertou Heritage Park on November 23, 2013 and focused on the concerns of Mi'kmaw residents in Membertou and Eskasoni, both of which are located on Cape Breton Island. Participants at this meeting shared the following concerns: chemicals in the water, resulting in toxins in food; toxic waste in the sewer system, including diesel, paint, and paint thinner; contamination of the bay and fish due to pulp wood from the pulp industry; power lines running through reserves; and high rates of certain illnesses and disabilities in the community, including cancer, diabetes, high blood pressure, asthma, and learning disabilities (e.g., autism).

The final meeting and convergence workshop was held at the Halifax Forum on January 11, 2014 and brought together both Mi'kmaw and African Nova Scotian community members residing in Halifax Regional Municipality (HRM) and surrounding areas. The Halifax event comprised of two separate segments: a meeting held in the morning for residents in the HRM and surrounding regions (reflecting the approach used at the workshops in the other regions), followed by a convergence workshop in the afternoon that converged residents from all of the regions. Participants who attended the morning meeting

shared the following concerns: the siting of the Nova Scotia Power Plant in the Mi'kmaw community of Tuff's Cove on the Halifax Harbour (which was a traditional Mi'kmaw community that was destroyed with the Halifax Explosion), which is impacting the ecosystem of Halifax Harbour; a public waste disposal site near to the Millbrook First Nation community in Truro that is no longer used and is now covered up with trees; the environmentally hazardous methods used by Nova Scotia Sand and Gravel to dig up and clean sand in Indian Brook; oil fumes from car mechanic businesses in the North End; industrial pollution coming into Nova Scotia from Ohio and New York, which pollutes the lakes when it rains; and high rates of cancer and other illnesses in Mi'kmaw and African Nova Scotian communities in the HRM.

The afternoon convergence workshop comprised of two facilitated break-out sessions. The first session entitled "Past, Current and Future Priorities and Advocacy Efforts" focused on effective advocacy and mobilizing activities community members can engage in to influence legislators and policymakers around environmental injustices in their community. For example, they discussed the need to identify community members who can mobilize other community members to take action around environmental injustices; build solidarity among residents across Nova Scotia to create a network across regions where residents (including youth) can unite in the fight against environmental injustice; create opportunities for environmental groups to play a larger advocacy role; ensure government accountability for the siting and monitoring of toxic facilities and other environmental hazards, including ensuring that government policies address environmental injustices through compensation, removal or remediation; ensure that government policies recognize treaty rights when dealing with environmental injustice in Mi'kmaw and other Aboriginal communities; and incorporate an environmental justice framework into municipal, provincial, and federal policies.

The second workshop session, which was entitled "Defining the Way Forward," focused on how community-based participatory action research could support community members in future advocacy and mobilizing efforts around environmental injustice. More specifically, participants discussed the components of an effective and sustainable community-based research model for engaging and building capacity and collaboration among residents and other stakeholders. For example, participants at this session discussed the following issues: utilizing a participatory action research model that evolves out of the community, is community-led, and is defined wholly or partly by the community; ensuring that the research design and approach reflect the historical and present-day experiences of community members; highlighting how historical and present-day systemic inequalities have lead to broader patterns of environmental injustices existing throughout the province; training community members about how to conduct research in their own communities, including educating community members about the "language of research" in ways that enable them to have a common understanding and common language that facilitates meaningful engagement and dialogue with academics and policymakers; creating opportunities for 4 WALDRON

communities to learn from one another about best practices for addressing environmental injustice; highlighting the success stories of community members, including examples of community resilience; engaging youth of diverse ages in research to ensure that they have a strong voice in decision-making and research processes; and ensuring that research goals are realized in ways that affect policy change in communities affected by environmental injustices.

This session also engaged participants in a discussion on how media (including social media), as well as various knowledge sharing and educational resources produced from the project team (documentary film, environmental justice mapping portal, workshop report, project website, etc.) could be used to create awareness about environmental injustices in Mi'kmaw and African Nova Scotian communities and engage and mobilize residents and the general public. One of the more significant resources being developed as part of the ENRICH project is an environmental justice mapping portal. It is an interactive and evolving map-based website that aims to show the location of toxic facilities and other environmental hazards near to communities inhabited mainly by Mi'kmaw and African Nova Scotian communities, as well as the working poor. It will feature an inventory of health, socioeconomic, and geographic data on environmental injustice in Nova Scotia, as well as a multimedia online forum.

DISCUSSION

The workshops represent one stage of a multi-stage and multi-layered project that commenced in 2012. Following the final workshop on January 11, 2014, the project team began carrying out a number of workshop follow-up activities in collaboration with diverse stakeholders to support new and ongoing advocacy efforts around environmental injustices. These activities include disseminating the workshop report and the final cut of the documentary film to community-based agencies and key federal, provincial, and municipal government departments and agencies; screening the film at various film festivals; meeting with key government people to identify how they can support residents around environmental injustices in their communities; exploring research partnerships with other researchers; developing university students' skills in conducting community-based research on environmental injustices; using media (newspapers, television, radio, project website, project newsletter, project Facebook page, online blogs, and podcasts) to communicate workshop findings and other relevant issues related to environmental injustices in the province to the general public; developing the environmental justice mapping portal; and preparing grants for a future study on environmental injustices in Mi'kmaw and African Nova Scotian communities.

As the project team moves forward to the next stage of the project, it is important to reflect on the many milestones, challenges, and successes the project has achieved and experienced over the past two years. These milestones, challenges, and successes can be discussed in relation to three main activities: 1) community engagement, 2) documenting the personal stories of residents,

and 3) using an innovative multi-pronged approach to knowledge sharing and mobilizing.

First, while the team has been successful in engaging a diverse group of stakeholders (government, communitybased agencies, environmental professionals, etc.), it continues to face some challenges engaging Mi'kmaw and African Nova Scotian community members in the identified regions. Consequently, considerably more work needs to be done building collaborative partnerships with community members involved in grassroots mobilizing efforts related to environmental injustices. The team recognizes that engaging racialized communities requires a shift in thinking about how power, privilege, and equity are implicated in relationship-building, partnerships, and research with marginalized communities, in general. For example, considerations about how researchers can work with rather than for or on behalf of communities must be premised on an authentic desire to engage in partnerships that involve equitable power sharing with respect to how research data and knowledge are owned, collected, analyzed, and shared. Therefore, building organic, trusting, collaborative, and reciprocal relationships with community members must be a priority when collaborating with racialized and other marginalized communities. This involves recognizing and respecting community members as experts in their own lives, fully involving them at every stage of the research process, valuing the contributions they make to all project activities and decision-making processes, and ensuring that they are full participants in the co-creation and sharing of knowledge.

Second, the team has had its greatest success in bringing together those community members who *have* been passionate about sharing their stories and personal anecdotes about how residence near to toxic landfills and waste dumps has affected their health and well-being. The intimate nature of the workshops provided the research team with invaluable insights into residents' concerns, priorities, struggles, and hopes for the future. These insights will help guide future research studies on environmental justice conducted by the team, as well as support ongoing and new mobilizing and advocacy efforts around the removal or re-directing of toxic facilities and other environmental hazards near to these communities.

Finally, the ENRICH project exemplifies the multiple, creative, innovative, and timely ways in which research data and knowledge can be shared with community members, policymakers, agency professionals, students, faculty/researchers, and media. Since its inception, the project has engaged with both traditional and cuttingedge approaches to sharing and mobilizing knowledge about environmental injustices in racialized communities. Consequently, it stands at the crossroads between the traditionalist principles and values upon which community-based research must be premised and the innovative, inventive, creative, original, and new ways of conceptualizing how community-based participatory action research and research in general, can be conducted. Consequently, the ENRICH project is illustrative of a novel community-based research model in which new technologies and media can co-exist with the core

principles of community involvement, community ownership, collaboration, reciprocity, and community capacity-building—all of which will never go out of style.

CONCLUSION

In closing, the research team remains grateful for the opportunities it had to meet and build relationships with residents. It impressed upon the team how crucial it is to conduct research that is grounded in and evolves out of the priorities, concerns, and needs of community members first and foremost. Moreover, the team came to a greater appreciation for how important it is to create spaces and opportunities for divergent voices to resonate throughout the project. In moving forward, the team hopes to remain open, flexible, and accommodating to new ways of thinking about how the ENRICH project can not only stay true to the core principles of a communitybased participatory action approach, but also "keep its ears to the ground" by engaging with non-traditional approaches to community engagement, research, knowledge sharing, and mobilizing.

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Address correspondence to:

Ingrid R.G. Waldron
School of Nursing
Dalhousie University
5869 University Ave., Room G19
Halifax, NS B3H 4R2
Canada

E-mail: iwaldron@dal.ca