



Knowledge Translation Strategies to Strengthen Community Resilience in Response to Climate Change

From the Special Editions Editor

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This *JCES* special issue features articles focused on the use of knowledge translation strategies across diverse populations to enhance community adaptability to climate change. In medicine, it is well documented that effective knowledge translation of relevant biomedical and clinical research studies form the foundation of evidence-based medicine in clinical practice to improve patient health outcomes. Furthermore, Dr. Kathy Eljiz and colleagues state that “meaningful knowledge translation can occur through the understanding and matching of appropriate communication mediums that are relevant for different stakeholders or audiences” (Eljiz, Greenfield, Hogden, Taylor, Siddiqui, Agaliotis, & Milosavljevic, 2020, p. 1). Very little is known concerning the impact of meaningful knowledge translation strategies across community stakeholders to facilitate the adaptation of communities to climate change.

Climate change is a global public health problem that adversely impacts both developed and underdeveloped countries. Studies have also linked climate change to the current COVID-19 pandemic that has wreaked havoc on the public health, socioeconomic status, education, and mortality rates of communities across the globe (Gorji & Gorji, 2020). How will communities thrive or even survive in the midst of climate change? What is the role of knowledge translation in creating a more resilient community in response to hardships such as coastal erosion, declining forestry, wildlife and fishery, etc. resulting from climate change? The articles in this *JCES* special issue highlight the importance of knowledge translation strategies and different modes of communication on the science and environmental effects of climate change across multiple sectors of the community.

In the poem, “Resilience of Nature and Life,” Somali Chakrabarti (2016) declares, “Nature is resilient. Tiny trees and weeds never give

up hope and keep on sprouting, showing their resilience and determination.” How will vulnerable communities endure the adverse effects of climate change and become more resilient over time? It requires innovative approaches to the knowledge translation of complex concepts, and scientific language of climate change that may be used by populations of diverse backgrounds in the community. Moreover, these knowledge translation strategies should engage youth and young adults early in their educational careers to become more aware of climate change issues, the impact on the environment, and their roles as responsible citizens in the care of creation. Two articles in this special issue demonstrate the successful integration of community-engaged learning experiences centered on knowledge translation, citizen science, and climate change for Canadian youth and high school students: “Enlisting Students to Transcribe Historical Climate and Weather Data For Research: Building Knowledge Translation Via Classroom-based Citizen Science” by Drew Bush, Victoria Slonosky, Geoffrey Pearce, and Renee Sieber; and “Knowledge Mobilization, Citizen Science, and Education” by Bryce Gunson, Brenda L. Murphy, and Laura Jayne Brown. These articles enhance the students’ awareness and understanding of citizen science and environmental preservation and their role in minimizing threats to the local ecosystem by climate change.

Meaningful knowledge translation must involve diverse means of communication to relevant stakeholders (Eljiz et al., 2020). This is demonstrated in the article, “Engaging Diverse Audiences: The Role of Community Radio in Rural Climate Change Knowledge Translation” by Abdul-Rahim Abdulai, Vincent Kuuteryiri Chireh, and Roza Tchoukaleyska. Unlike people in urban areas, rural populations often do not have access to Internet services and social media and other broadband services. Hence, the dissemination of

critical information may be delayed or non-existent in some remote rural areas. The authors emphasize the importance of preserving community radio to disseminate climate change information to rural communities. The knowledge transfer of climate change information is also needed to inform municipal planning and policies regulating use by the community of environmental resources such as natural gas, especially from the stakeholder's perspective. This is addressed in the article "The Role of Scientific Evidence in Canada's West Coast Energy Conflicts" by Holly J.K. Clermont, Ann Dale, Leslie King, and Maureen Reed. Other features of this special issue include book reviews, Student Voices, and Community Perspectives.

References

- Chakrabarti, S. (2016). Resilience of nature and life. *All Poetry*. Retrieved from <https://allpoetry.com/poem/12574595-Resilience-of-Nature-and-Life-by-Somali>.
- Eljiz, K., Greenfield, D., Hogden, A., Taylor, R., Siddiqui, N., Agalotis, M., & Milosavljevic, M. (2020). Improving knowledge translation for increased engagement and impact in healthcare. *British Medical Journal Open Quality*, 9(3), 1–6.
- Gorji, S., & Gorji, A. (2020). COVID-19 pandemic: The possible influence of the long-term ignorance about climate change. *Environmental Science and Pollution Research International*, 1–5. Retrieved from <https://doi.org/10.1007/s11356-020-12167-z>.

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