

# LINKING LEARNERS FOR LIFE WHERE THEY LIVE (L<sup>4</sup>): DEVELOPING A GLOBAL HEALTH INITIATIVE FOR STUDENT ENGAGEMENT



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This article describes a graduate student learning experience as part of an international nursing collaborative working together to develop an academic partnership for global health education in the circumpolar north. The experience provided an opportunity to conduct a pilot project in a rural, remote, northern community using an indigenous, global context. Building on the Canadian–Siberian collaboration, the graduate student attended an academic institution in Siberia, where she focused on the sharing of expertise, knowledge, and insights in order to address the challenges facing indigenous people in achieving optimal health and well-being in the circumpolar north. The goal was to create a foundation for “putting health into place” in a northern context, with the hope of creating shared learning opportunities for undergraduate students between the 2 countries. The intent is to share the approach used by the graduate student to use a conceptual model to assess the feasibility of creating a context-relevant global health experience for northern nursing education. (Index words: Global health; Circumpolar; Indigenous; Local–Global; Conceptual framework; Communities; Therapeutic landscape) *J Prof Nurs* 31:359–364, 2015. © 2015 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

THERE IS A growing interest in university-level initiatives that support student learning and enhance the understanding of global health (Koplan et al., 2009). According to the World Health Organization (2013), health is considered a fundamental human right; and therefore, the attainment of global health is “...a socially desirable objective, actually a primary objective, on which to focus” (p.2). To address this objective, undergraduate nursing education often includes study

abroad programs, international student clinical practicums, exchange programs, service–learning, and global health initiatives (Kulbok, Mitchell, Glick, & Greiner, 2012). In North America, the accreditation process for many undergraduate nursing programs requires evidence of strategies to support student learning in cultural competency most commonly met through international student practicum experiences. Such experiences are often insightful and life changing for individuals, yet may not be situated within an overarching global health education strategy.

A recent systematic review of the literature on global health experiences in nursing education suggests that although future graduates will undoubtedly care for patients and families from diverse cultural backgrounds (whether practicing at home or abroad), international learning experiences that are part of a university curriculum are limited, rarely conceptually grounded, and lack formal evaluation (Kulbok et al., 2012). Similar findings have been reported by McAuliffe and Cohen (2005), whose

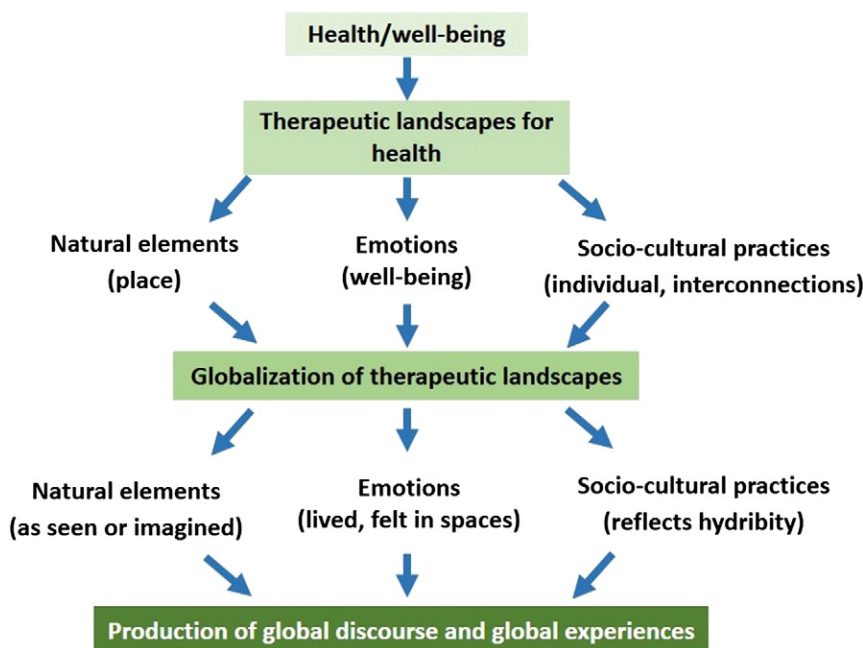
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**Figure 1.** Source: Hoyes (2007) From Rishikesh to Yogaville: The globalization of therapeutic landscapes. In Williams, A. (Ed.) *Geographies of Health: Therapeutic Landscapes*. Reproduced with permission by Ashgate Publishing Company.

experience in the area spans more than 30 years. International student experiences are expensive, often limiting participation to students who can independently fund a study-abroad experience (Calhoone, Wildcat, Annett, Pierotti, & Giswold, 2003). To adequately address the gaps in providing global health education, a more visionary and inclusive approach to redesigning interprofessional health science education is needed.

In 2007, the American Academy of Nurses recommended that international student experiences within the United States be replaced by global health initiatives (Rosenkoetter & Nardi, 2007). Leffers and Mitchell (2011) consider collaboration and partnerships as core constructs in creating a global health strategy and suggest that global partnerships be built based on an engaged process of mutual goal setting, team work, and capacity building with shared participation between the host and home countries. Foundational principles of global initiatives should include “cultural bridging, cross cultural communication, mutual respect and mutual learning” (Leffers & Mitchell, 2011, p. 95). To become more locally responsive and yet globally connected in knowledge mobilization for best practices, Frenk et al. (2010) appeal to both the health and education systems to acknowledge the interdependence necessary to achieve positive outcomes for global health. A redesign for new instructional and institutional ways of learning involves transformative learning to not only acquire new knowledge and skills but also to socialize students in a global context and develop attributes of leadership that are globally relevant and applicable (Frenk et al., 2010). Others suggest that a pedagogical shift in conceptual thinking, moving from content to process thinking, is needed in order to link teachings with culture, community, and ways of knowing to achieve a broader perspective beyond western views (Stansfield & Browne, 2013).

This article describes a graduate student learning experience as part of an international nursing collaborative working together to develop an academic partnership for global health education in the circumpolar north. The intent is to share the approach used by the graduate student to use a conceptual model to assess the feasibility of creating an undergraduate student practicum as part of the collaboration.

## Background

Historically, the college of nursing at the University of Saskatchewan (Saskatoon, Canada) provided an international student placement program as part of the final-year senior practicum. The approach of the college of nursing to international placements was predicated on the assumptions that these experiences added value and understanding for individual students and achieved cultural competence that was transferable across cultural groups. As the college of nursing began to challenge these past assumptions, a global health strategy was created as part of its strategic plan in 2011. The principles of the global health strategy included health equity, diversity, community and inclusiveness, and mutually beneficial, reciprocal, and respectful relationships. Foci included rural, remote, northern, and indigenous health equity, promoting culture and community within our local campuses, including providing adequate supports to aboriginal, international, and new Canadian students (Kulbok et al., 2012). Examining how the selection of host countries could align with the strategic direction of the college and the research expertise of faculty was a fundamental principle in supporting such experiences. Given the cultural context of Saskatchewan, as described below, it became clear that creating a global health experience would need to reflect the college of nursing's strategic plan and consider the influences

of social, cultural, and economic factors on health in northern, indigenous communities.

The University of Saskatchewan has a well-established relationship with the North-Eastern Federal University (NEFU) in Yakutsk, Republic of Sakha, Yakutia, Siberia, through its history of a virtual collaboration known as the University of the Arctic. NEFU was established in 1956 and is home to 10,000 students and 800 academic staff, making it the largest institution of higher learning in northeast Russia ([Northeastern Federal University College of Nursing, 2010](#)). In 2004, NEFU offered the first 4-year baccalaureate in nursing degree in the region. The degree is similar in content and structure to a Canadian postregistration baccalaureate. Consistent with the Canadian context, advancement within the nursing profession to managerial and leadership positions requires advanced education.

### Linking Intellectual Communities Across Borders

One of the goals within the University of Saskatchewan's College of Nursing strategic plan for local–global health initiatives was to create ways of acknowledging indigenous ways of knowing in health. The college of nursing created a project entitled “Linking Learners with Leaders for Life where they Live” ( $L^4$ ) to develop opportunities for northern students to become leaders in addressing the health concerns of the north by linking with others within the circumpolar region. The intention of  $L^4$  is to situate students to build capacity through local–global relationships. Within the nursing curriculum, the provision of global lessons with local application positions students to begin the process of transformation. A practicum opportunity for a master's of nursing student at the University of Saskatchewan became apparent, providing the college of nursing with an opportunity to pilot the  $L^4$  project in a rural, remote, and northern community using an indigenous, global context. The graduate student accompanied a team of professors from the college of nursing on a site visit to Yakutsk, Siberia. As part of the  $L^4$  experience, the graduate student's role was to examine if opportunities existed to share expertise, knowledge, and insights to address the challenges facing indigenous people in achieving optimal health and well-being in the circumpolar north. The goal was to assess the feasibility of developing a learning community for “putting health into place” in a northern context. The focus was on determining if personal, social, economic, and environmental issues were linked in terms of sense of place, well-being, and culture. The outcome would determine the relevance and feasibility of a global health experience for nursing students between Saskatchewan and Siberia.

### Conceptual Foundations for Program Development

There is emergent literature on the concept of therapeutic landscapes (TLs) as a way of understanding the meaning and nature of place in relation to health and health care delivery ([Gesler, 1992](#); [Kearns & Gesler, 2007](#); [Williams, 1998](#)). TL has grown as a conceptual framework. It began as a study of linking social theory and cultural geography

to better understand how meaning and sense of place impacted health and health care ([Gesler, 1992](#)). [Williams \(1998\)](#) further defined landscape from the perspective of humanistic geography suggesting that landscapes are symbolic and, when interpreted, have meaning embedded in a sense of place. [Hoey \(2007\)](#) asserts that TL makes an important contribution to health geography; it is essentially an academic concept connecting place and health. Within TL, the concept of therapeutic community focuses attention on the connectedness of social relationships, meaningful work, and the quality of the environment to promote healing. Although a physical space for community can be intentionally constructed, such as space for treatment in a hospital or clinic, a sense of community can only be experienced ([Hoey, 2007](#)).

TL was chosen as a conceptual framework to guide the  $L^4$  project because the concept of therapeutic communities allows for identification of different indicators within the environment that could be studied within a global context, such as the circumpolar north as seen in [Figure 1](#). TL also allowed for interactions in diverse ways of knowing and thinking between persons and environments.

## Results

In Canada, twelve factors are recognized as the key determinants of health: income and social status, social support networks, education and literacy, employment and working conditions, social environment, physical environments including both the natural and built environments, personal health practices and coping skills, child development, biology and genetic endowment, health services, gender, and culture ([Public Health Agency of Canada, 2014](#)). For many of these, data for the Republic of Yakutia were not readily available. However, available data as well as the observations made during the graduate student's  $L^4$  site visit to the Republic of Yakutia suggest many similarities with northern Saskatchewan.

The student accompanied the Saskatchewan faculty to all meetings within the university, hospitals, community clinics, and government officials. With the assistance of an interpreter, she was able to interact with the dean of nursing and nurse leaders from three hospitals: federal, municipal, a state run, acute care tuberculosis center, a radiation treatment clinic, a community clinic experience, and a meeting with the Deputy Minister of Health for Yakutia. She was also invited to present her experience in advanced nursing education at a conference hosted by the university to discuss nursing practice in northern Russia. Using TL as a model, her role was to assess the feasibility of creating an undergraduate student nurse experience between the two universities. The results suggest that both sites are adequately linked in context to support circumpolar comparisons for determinants of health.

### Demographics

The Republic of Yakutia covers a vast geographic area of over 1 million  $\text{mi}^2$  but has a total population of only 1,015,600. The majority (64%) live in rural and remote regions with only 193,000 living in the capital city of

Yakutsk (Burtseva et al., 2013). The average income is as low as 40% below the current standard of living; the quality of housing is also below standard (Adomanis, 2013; Burtseva et al., 2013). Northern Saskatchewan covers approximately 119,000 mi<sup>2</sup> and is home to 36,000 people who live in over 70 communities spread across the region. The number of dwellings requiring major repairs is five times the national rate, and the rate of crowding is greater than ten times the rate for the province of Saskatchewan as a whole. The median income is significantly below provincial and national medians (Irvine, Quinn, & Stockdale, 2011). The demographic data indicate that the population densities of northern Saskatchewan and the Republic of Yakutia are similar and these regions appear to face similar challenges with respect to poverty and poor housing. The graduate student travelled throughout Yakutsk and spent time in a rural, indigenous community which reflected the reported conditions. Two key findings that differed from northern Saskatchewan were as follows: (a) water quality in terms of running water and plumbing in homes and the health clinic and (b) providing infection control measures and sterile technique was challenging due to shared bars of soap, cloth hand towels, and limited water supply.

### Leading Health Concerns as Natural Elements of Place

The leading cause of death in the Republic of Yakutia is cardiovascular disease, cancer, and trauma (Rosstat-Federal State Statistics Service, 2013); this broadly aligns with the leading causes of death in northern Saskatchewan, which are injury, cancer, and circulatory disease (Irvine et al., 2011). Infant mortality rates in the northern regions of both Russia and Canada are above the national average. Similar to northern Saskatchewan, a leading health care concern in the Republic of Yakutia is respiratory disease, particularly tuberculosis; digestive and genitourinary diseases are also prevalent with the republic's remote settings. The extreme cold in winter also affects the respiratory system and skin integrity (frostbite). Observational assessment demonstrated outstanding opportunities for shared learning related to pre- and postnatal care, wound care, chronic disease management, home care, infection control in tuberculosis, and outpatient clinical environments.

### Well-Being and Environmental Factors

The personal, social, economic, and environmental factors considered the most prevalent contributors to health behaviors; overall health and quality of life in northern Saskatchewan include unemployment, education, smoking, overweight, and cost of food (Irvine et al., 2011). No comparable data were available for the Republic of Yakutia. Site visits to two rural communities near Yakutsk revealed that the local people also have similar experiences to northern Saskatchewan residents in terms of average household income, access to education, quality of drinking water, food security (refrigeration), adequate housing, smoking, and obesity. Rural clinics in Yakutia are similar to Canadian, outpost nursing stations with nurses as the key providers of

health care in consultation with a remotely located physician. Unique to Yakutia is the Research Centre of Phthisiology, a 150-bed hospital in the city of Yakutsk, aimed at tuberculosis control. Children with tuberculosis are relocated to sanatoriums for treatment. Nurses shared that their role includes collaboration with schools for pediatric and childhood development. Nutrition was identified as the key nursing concern for the children, particularly upon return to the community (Pavlova, 2013). TL provides a framework to discuss the impact of sanatoriums and residential care for children with tuberculosis as compared to the community-based care from both historical and prospective examinations given the evolution of these methods between countries.

### Sociocultural Connections

There is archeological evidence that Canadian indigenous people share a close genetic relationship with Siberia (Waldram, Herring, & Young, 2006). As new techniques have been developed to analyze DNA, archaeologists, linguists, and physical anthropologists have compiled information to confirm that significant geographic similarities exist and that earliest ancestors of aboriginal people came to the Americas from Asia (Waldram et al., 2006). Geological evidence indicates that the Bering Land Bridge was exposed years ago, connecting the two continents. Some aboriginal peoples that believe that they were "created" where they live today now speculate about a reverse migration between North America and Siberia through the Bering Land Bridge creating an interconnectedness (2006). The population of both northern Saskatchewan and the Republic of Yakutia is characterized by a large portion of indigenous peoples. In northern Saskatchewan, over 85% of the population identify themselves as aboriginal (22% Metis and 62% First Nations—predominantly Cree and Dene); this is substantially higher than the rest of Saskatchewan (15%). Almost half the population (46%) lives in First Nations communities. In the Republic of Yakutia, 50% of the population is Yakuts (Rosstat-Federal State Statistics Service, 2013).

### Discussion

Issues related to health and health care within the Republic of Yakutia share many similarities to the Canadian north and are reflected in NEFU's nursing curriculum. There is an emphasis on nursing care of nomadic indigenous people, geriatrics, medical/surgical, maternal child, emergency, and infectious diseases (NEFU College of Nursing, 2010).

Given that natural geography plays a significant role to the people of northern Saskatchewan and Yakutsk, the conceptualization of community within a framework of TL exemplifies the way determinants of health are experienced. TL provides a natural link for students to acknowledge and identify how indigenous knowledge, which interprets life through cultural beliefs, environment, and interpersonal relationships (Stansfield & Browne, 2013), influences health outcomes within northern and circumpolar communities. This project confirmed that using a conceptual approach for assessing

the feasibility for a global health experience not only allows for integration of shared learning but also provides a pathway to measure the outcome of the student experience from a high-level, global perspective.

The L<sup>4</sup> project provided an experiential learning opportunity for a graduate student to understand the complexities of collaborating with multiple leaders in health to create a global experience. Developing relationships with leaders in nursing education, service delivery, health regions, and government ministries within a global context is a first step. The results of the project support a willingness to pursue a joint collaboration. The foundation has been set for the two colleges of nursing to work together to determine the emphasis to be placed on shared health conditions that cross global boundaries, knowledge sharing related to access to specific health needs, and resource allocation for student learning experiences that promote health in place as part of nursing curricula.

The outcome of this project will be used to establish a future Summer Institute for northern nursing education in indigenous health and well-being, with student exchanges between the University of Saskatchewan and NEFU. As aboriginal students rarely participate in international exchanges or collaborations, for a variety of social and economic reasons, there will be a concerted effort to make international exchange feasible and relevant for aboriginal nursing students. The Summer Institute will be a global collaboration to learn about health and health practices in the circumpolar north. This initiative builds on geographical similarities that nursing students from northern Saskatchewan and northeastern Siberia will confront as well as the obvious potential to create local–global linkages at the community level.

TL purports that relationships within therapeutic communities can be sustained through shared values of inclusiveness and transparency. The idea of a joint summer institute positions students to explore shared meanings in caring for indigenous peoples' health and to explore the diversities in understanding of healing spaces across continents. Customizing existing knowledge to design a community that brings people together for access to culturally relevant best practices supports the needs of students who will work within our respective northern communities as future registered nurses. Such an endeavor could also provide a resource that is mutually beneficial and well positioned to support and strengthen global initiatives for faculty scholarship in circumpolar nursing and health. This graduate student experience revealed topics for future research collaborations on relevant health issues, particularly tuberculosis, that can help create stronger local–global links, promoting health and well-being.

### Conclusion

Global intelligence and culturally sensitive leadership are considered central to accomplishing a well-defined, sustainable, global health initiative (Canadian Nurses Association, 2009). The similarities in health challenges that are accentuated by remoteness and accessibility presented a common understanding for nursing educa-

tion and practice. The University of Saskatchewan and NEFU have worked together to create an atmosphere of shared knowledge and deep respect for the people of the circumpolar north whom we serve. To create a global health experience, a beginning step is building relationships. The inclusion of a graduate student provided a common ground for working together across borders and an ability to tap into tacit knowledge situated in the lived experience of nurses who are learning to be highly creative in their practice. A key strategy for sustainability is to build a high degree of synergy among global partners. Natural linkages exist through a common understanding of the nursing profession. Acknowledging and validating the unique contributions each country can contribute to a global health experience is vital for shared learning to expand beyond traditional thinking and health practices.

This L<sup>4</sup> experience serves as an example of how graduate level learners can take action to connect local–global issues that influence health outcomes. The outcome of the L<sup>4</sup> experience was inspired by the excitement of nurses who are geographically isolated with knowledge that was previously untapped. Graduate level nursing education is not possible in Yakutsk; thus, the opportunity to share advanced learning experiences was exceptional. A readiness to collaborate on global health was evident. The outcome of this student experience suggests that nurse educators should consider the inclusion of indigenous health and well-being within circumpolar regions as part of their scholarship of teaching and research. TL (Williams, 1998) was successfully used to create a global health opportunity. Replicating the approach of TL supports understanding the meaning of community as a sense of place where health and well-being is experienced. Respecting diversity and acknowledging the influence of relationships that exist within communities on how health is perceived are fundamental when partnering in global health.

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### References

- Adomanis, M. (2013). Russian life expectancy fell in 2012. Retrieved from [http://www.forbes.com/sites/markadomanis/2013/04/04/russian-life-expectancy-fell-in-2012/#.??&\\_suid=1398361353310032523022836673404](http://www.forbes.com/sites/markadomanis/2013/04/04/russian-life-expectancy-fell-in-2012/#.??&_suid=1398361353310032523022836673404).
- Burtseva, T., Uvarova, T., Savvina, M., Shadrin, V., Avrusin, S & Chasnyk, V. (2013). Health status of native people living in the Republic of Sakha (Yakutia). *International Journal of Circumpolar Health*, 72, 21166 (Retrieved from <http://dx.doi.org/10.3402/ijch.V72i0.21166>).
- Calhoone, J., Wildcat, D., Annett, C., Pierotti, R. & Giswold, W (2003). Creating meaningful study abroad programs for American Indian postsecondary students. *Journal of American Indian Education*, 42, 46–57.

- Canadian Nurses Association (2009). Position statement global health and equity. (Retrieved from <https://www.cna-aiic.ca/en/download-buy/global-health-issues>).
- Frenk, J., Chen, L., Bhutta, Z., Cohen, J., Crisp, N., Evans, T., et al (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376, 1923–1958, [http://dx.doi.org/10.1016/S0140-6736\(10\)61854-5](http://dx.doi.org/10.1016/S0140-6736(10)61854-5).
- Gesler, W. (1992). Therapeutic landscapes: Medical issues in light of the new cultural geography. *Social Science and Medicine*, 34, 735–746.
- Hoey, B. (2007). *Therapeutic uses of place in the intentional space of purposive community*. In A. Williams (Ed.). *Geographies of Health: Therapeutic landscapes*. (pp. 297–314). Burlington, VT: Ashgate Publishing Company.
- Hoyes, Anne-Cecile (2007). *From rishikesh to yogaville: The globalization of therapeutic landscapes*. In A. Williams (Ed.). *Geographies of Health: Therapeutic landscapes*. (pp. 297–314). Burlington, VT: Ashgate Publishing Company.
- Irvine, J., Quinn, B. & Stockdale, D. (2011). Northern Saskatchewan health indicators report 2011. Retrieved from <http://www.athabascahealth.ca/images/reports/Northern%20Saskatchewan%20Health%20Indicators%20Report%202011.pdf>.
- Kearns, R. & Gesler, W. (2007). *Putting health into place*. Syracuse: Syracuse University Press.
- Koplan, J., Bond, C., Merson, M., Reddy, K., Rosrigues, M., Sewankambo, N., et al (2009). Viewpoint: Towards a common definition of global health. *The Lancet*, 373, 1993–1995, [http://dx.doi.org/10.1016/S0140-6736\(09\)60332-9](http://dx.doi.org/10.1016/S0140-6736(09)60332-9).
- Kulbok, P., Mitchell, E., Glick, D. & Greiner, D. (2012). International experiences in nursing education: A review of the literature. *International Journal of Nursing Education Scholarship*, 9, 1–21, <http://dx.doi.org/10.1515/1548-923X.2365>.
- Leffers, J. & Mitchell, E. (2011). Conceptual model for partnership and sustainability in global health. *Public Health Nursing*, 28, 91–102.
- McAuliffe, M. & Cohen, M. (2005). International nursing research and educational exchanges: A review of the literature. *Nursing Outlook*, 53, 21–25.
- Northeastern Federal University College of Nursing (2010). *Undergraduate program curriculum: Author*.
- Pavlova, S. (2013). The problem of nutrition in children's sanatorium in the Republic of Sakha Yakutia. . (Manuscript in preparation) "Republican Children Sanatorium" named T.P. Dmitrievoy, The Republic of Sakha (Yakutia), Yakutsk.
- Public Health Agency of Canada (2014). Report on Canadian best practice portal: Social determinants of health. (Retrieved from <http://cbpp-pcpe.phac-aspc.gc.ca/public-health-topics/social-determinants-of-health/>).
- Rosenkoetter, M. & Nardi, D. (2007). American Academy of Nursing expert panel on global nursing and health: White paper on global nursing and health. *Journal of Transcultural Nursing*, 18, 305–315, <http://dx.doi.org/10.1177/1043659607305188>.
- Rosstat-Federal State Statistics Service (2013). Demographic Yearbook of Russia 201s. (Retrieved from April 22, 2014 [http://www.gks.ru/bgd/regl/B13\\_16/Main.htm](http://www.gks.ru/bgd/regl/B13_16/Main.htm)).
- Stansfield, D. & Browne, A. (2013). The relevance of indigenous knowledge for nursing curriculum. *International Journal of Nursing Education Scholarship*, 10, 143–151, <http://dx.doi.org/10.1515/ijnes-2012-0041>.
- Waldram, J., Herring, D. & Young, T. (2006). *Aboriginal health in Canada*. (2nd ed.). London: University of Toronto Press Incorporate.
- Williams, A. (1998). Therapeutic landscapes in holistic medicine. *Social Science and Medicine*, 46, 1193–1203.
- World Health Organization (2013). The right to health, Fact sheet N°323. Retrieved from <http://www.who.int/mediacentre/factsheets/fs323/en/>.