Editorial: Winter 2022: Hold the Line

Marianne Trevorrow,[1] MA, ND

We are well into another challenging pandemic winter this edition after seeing an early surge last fall of RSV and influenza cases as well as COVID sub-variants. There has been a lot of information in the news about overwhelmed pediatric ERs and ICUs across Canada and delays in surgeries and cancer treatments, warnings about masking in indoor settings, and recommendations that people not come to work with cold or flu symptoms. There are also reports of Canada-wide shortages in pediatric acetaminophen, ibuprofen and amoxicillin brought on by a surge in demand associated with respiratory viruses.

Naturopathic care can certainly help reduce the overwhelm in our publicly funded front-line system. Our allied role in the prevention, diagnosis, and management of acute respiratory infections is grounded in our emphasis on lifestyle factors, as well as botanical, nutritional, hydrotherapeutic, and other traditional and complementary medicine (T&CM) therapies that can help treat many of these respiratory viruses. In this way, we stand alongside our colleagues in public and allied health care—pharmacists, midwives, and nurse practitioners (NPs)—but with our unique T&CM and planetary health lenses. We all share the same goals, which is to get through this winter and finally see the end of the COVID pandemic. But first, we need to survive the next few months, paying attention to our own levels of burnout and exhaustion brought on by the upheavals and isolation of the last three years, not to mention anxiety over our vulnerable patients and loved ones, including the elderly and young members of our own families.

We lead off this edition with a report from the chair of the CAND on progress and challenges with federal Government Relations work in 2022. One notable success this year was the addition of NDs to the list of covered healthcare professionals with Veterans Affairs Canada (VAC), and while negotiations with Indigenous Services Canada (ISC) and other agencies are in still in progress, I would highlight the CAND's tireless work with Public Health Agency of Canada's Allied Health Advisory Table, and the Natural and Non-Prescription Health Products Directorate (NNHPD). More and more, our presence is being noted and we are being asked to contribute to helping solve the problems/shortages in the Canadian primary health care system.

Along these lines, we are publishing an important and timely article from Carfagnini et al. on the inclusion of NDs in Northern Ontario Primary Care, which we've made an Editor's Selection for this edition. As they argue, recruitment of NDs into publicly funded multi-disciplinary community care could fill known healthcare recruitment gaps in these regions. Additionally, they make a case for the congruence between naturopathic medicine's more holistic approach to care and local Indigenous Peoples' interconnected understanding of health and wellness, proposing solutions in the non-insured health benefits system and community health systems to help alleviate the health inequities in this region.

Our second article for this edition is a narrative review by Deenadayalan et al. of the current evidence for the analgesic effects of hydrotherapy, a traditional intervention of the early European "nature cure" doctors. This article from an overseas team affiliated with the Naturopathy Medical College in Chennai, India, reviews the indexed literature on this topic and discusses potential mechanisms of benefit.

Our final submission is a strategy document from the World Naturopathic Federation (WNF) European Regional Group, which met in Lyon, France, in 2019 to formulate a strategy to promote naturopathy research in Europe. For those readers who are interested in the work of the WNF to build research infrastructure internationally, this article by Steele et al. shows the promise—and challenges—of building research infrastructure in that environment.

Finally, as the second calendar year for the *CAND Journal* ends, I'd like to take the time to wish our CAND members a peaceful holiday season and a happy and healthy 2023.

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To cite: Trevorrow M. Editorial: Winter 2022: Hold the Line. *CAND Journal*. 2022;29(4):1-2. https:/doi.org/10.54434/candj.131

Received: 07 November 2022; **Accepted:** 07 November 2022; **Published:** 15 December 2022

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ACKNOWLEDGEMENTS
Not applicable.

CONFLICTS OF INTEREST DISCLOSURE
I have read and understood the *CAND Journal*'s policy on conflicts of interest and declare that I have none.

FUNDING
This research did not receive any funding.

CANDJ

Report from the Chair

Mark Fontes, ND

Dear Members,

One of the key functions of the CAND, and one our members consistently advise is the most important to them, is advocating on behalf of the profession with the federal government. As a small health professional organization, this can sometimes seem a daunting task. However, with the advice of our government relations experts H+K and under the direction of our Director of Government Relations, Shawn O'Reilly, the CAND Government Relations Committee has made significant progress on behalf of the profession over the years. Persistent outreach for engagement has resulted in the CAND being a respected stakeholder with various government ministries and directorates, such as the Ministry of Health, Finance Ministry, Veterans Affairs Canada (VAC), and the Natural and Non-Prescription Health Products Directorate (NNHPD). As a stakeholder, the CAND has participated in numerous advisory committees, scientific review panels, and consultations providing advice and submissions from the profession's perspective. During the pandemic, the CAND was the only complementary and alternative medicine (CAM) organization invited to be a member of the Public Health Agency of Canada (PHAC) Allied Health Advisory Table, which resulted in naturopathic doctors (NDs) being recommended by PHAC to assist with community health.

We are very grateful to all the NDs across Canada who have represented the profession on various committees when the government has asked the CAND for input—consultations on Lyme disease, the opioid crisis, and revisiting the Canada Food Guide to name a few. By successfully taking part in these consultations and discussions, our profession can participate in future issues that significantly impact the health of Canadians while aiding the reach of our individual practices.

Engaging with the federal government is by its very nature a long-term commitment as governments and bureaucrats change, resulting in the need to raise awareness with new people and build new relationships. Perseverance is key to success in government relations. For example, our recent announcement that NDs were added to the VAC list of healthcare professionals approved to provide services to Veterans was the culmination of seven years of work with three successive governments, various Ministers of Veterans Affairs, Members of Parliament, senior bureaucrats and policy advisors. Retroactive to June 1, 2022, Veterans are now able to claim a maximum amount per year for naturopathic consultations and assessments (in line with the Public Service Health Care Plan policy for naturopathic care). This is an important first step and has opened the door to our continued engagement with VAC to secure coverage for a list of services NDs can provide to Veterans.

Over the same time period, the CAND has been advocating for coverage of naturopathic services for Indigenous peoples under the Non-Insured Health Benefits Program, a request supported by many Indigenous communities. Our success with VAC will help us move forward with Indigenous Services Canada on this important ask. We will be reaching out to members shortly via a survey to gather relevant information on the care NDs are providing to Indigenous people to include in our discussions and submissions. In addition to ongoing work with VAC and Indigenous Services Canada, the CAND has prepared, or is preparing, submissions on the marketing of products containing CBD, the review of the *Cannabis Act* and its regulations, and the consultation on exceptions to the Prescription Drug List. We will report on these and other initiatives in a future report.

Dr. Mark Fontes, ND, is Chair of the Canadian Association of Naturopathic Doctors.

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To cite: Fontes M. Report from the Chair. *CAND Journal*. 2022;29(4):3. https:/doi.org/10.54434/candj.129

Received: 07 November 2022; **Accepted:** 07 November 2022; **Published:** 15 December 2022

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Inclusion of Naturopaths in Northern Ontario Primary Care: A Proposed Solution for The Health Human Resources Shortage

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ABSTRACT

The shortage of primary healthcare practitioners, such as physicians and nurses, in northern Ontario has persisted for decades despite multiple strategies to address it. Poor health outcomes for people living in northern Ontario must be viewed through an equity lens that takes into account the multiple proximal, intermediate, and distal social determinants of health, including, but not limited to, the impact of colonization and continued colonialism on the health of Indigenous Peoples, challenges in housing, education and employment, as well as lack of food security. The increase in chronic health conditions in northern Ontario and the need for interprofessional healthcare teams that offer patient-centred care are key issues. Whole person care that takes into consideration the integration of body, mind, and spirit is central to Indigenous concepts of health and wellness, as well as being central to the foundations of naturopathic medical philosophy. Inclusion of naturopathic doctors in publicly funded multi-disciplinary primary healthcare settings is proposed as an achievable strategy to fill gaps in health human resources and advance the movement towards holistic care for Indigenous Peoples and others living in northern Ontario.

Key Words Indigenous, naturopathic, naturopath, primary healthcare practitioner shortage, holistic, CAM (complementary and alternative medicine).

INTRODUCTION

In order to engage with research related to Indigenous health issues, it is important that we, as the authors, outline how our positionalities may cohere or diverge from our research inquiry, influencing and potentially biasing our approach to answering the research question and ultimately writing a review. All authors currently reside in northern or southwestern areas of Ontario, Canada, and have diverse backgrounds and experiences in direct clinical care, healthcare leadership, and academia. At the time of manuscript writing, three of the four authors identify as white, cis-gendered graduate students completing master's degrees in the Health Sciences. The fourth author is from the Onondaga Nation, Beaver Clan, from the Six Nations of the Grand River Territory and provided guidance in the creation of the manuscript with the intent of collaborating to support the sharing of Indigenous perspectives from a First Nations lens. The authors collectively acknowledge that work in mainstream healthcare and academic sectors relies mainly on evidence-based knowledge that is rooted in western and largely colonial epistemologies. The impetus for the chosen topic of this review is to support the voices of those often not integrated into the mainstream health systems, including alternative care practitioners and those traditionally underserved by the current healthcare system.

The following review was initially written as an Intersectionality-Based Policy Analysis (IBPA) to meet the requirements of a master's level course related to Northern and Remote Health and Healthcare at Lakehead University. The authors jointly identified a current social and policy issue and each completed an independent literature review to answer the following research question: Nurses have filled many positions in primary health care in northern Ontario but a gap in recruitment and retention persists. Can naturopathic doctors (NDs) help to fill these gaps in primary healthcare delivery in northern Ontario? Following the completion of the IBPA and acknowledgement of the ongoing health human resources (HHR) crisis across Canada (and in particular northern Ontario), the authors chose to share this work in the form of a review. This paper presents a strong case for the inclusion of NDs to fill the current gaps in primary care, reducing the impact of the HHR crisis on the ability of individuals to access needed healthcare supports and services. An Indigenous

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To cite: Carfagnini J, Harvey A, Lizon M, McCarthy J. Inclusion of naturopaths in Northern Ontario primary care: A proposed solution for the health human resources shortage. *CAND Journal*. 2022;29(4):4-11. https:/doi.org/10.54434/candj.127

Received: 05 September 2022; **Accepted:** 03 November 2022; **Published:** 15 December 2022

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naturopathic doctor who provided invaluable perspectives and was a key source in the original IBPA was invited to collaborate in the authoring of this review.

Across the territory currently defined as "Canada," when individuals require health care, they often access primary care services as a first point of contact within the healthcare system. While mainstream primary healthcare models have served many people well, accessing health services is not without its challenges. Across Turtle Island, and more specifically in the territory now referred to as Canada, multiple healthcare deficits exist, including discrepancies in health outcomes between patient demographics,[1] inequitable healthcare provider (HCP) distribution, including physician shortages,[2,3,4,5,6] and ongoing systemic racism within the healthcare sector.[7,8] Healthcare inequities are especially evident in northern, rural, and remote regions. Despite universal coverage and primary healthcare delivery reforms, individuals living within these regions continue to experience compounding factors that lead to poorer health outcomes compared with their more southern and urban counterparts.[9] These compounding factors include, but are not limited to, the proximal, intermediate, and distal social determinants of health, which are the social and economic factors that influence health outcomes.[1]

As many factors combine to create poorer health outcomes in northern, rural, and remote Canada and the Indigenous communities therein, barriers and contributors to these outcomes must not be considered as mutually exclusive. Rather, these factors must be considered together to reveal a more realistic interpretation of how such outcomes affect the diverse populations of these areas, and how they may be addressed, improved, or completely dismantled. While this review acknowledges all social determinants of health, it explores the HCP shortage as it currently exists in northern Ontario—herein defined as the provincial North, spanning the North West and North East Local Health Integration Networks, which extend from the Quebec border to the Manitoba border and from Lake Huron to Hudson Bay.[10] Unique to this review is the recommendation of the integration of naturopathic doctors (NDs), regulated primary healthcare practitioners in Ontario,[11] as one solution to address the HCP shortage.

As HCP shortages persist in northern Ontario, resources are often stretched thin. To combat this, naturopathy, traditional Indigenous medicines, and other forms of medicine that exist outside the biomedical model are currently filling gaps in health care in certain rural and northern Ontario communities[12] and across the globe.[13,14] Research suggests that NDs, as primary HCPs, may be well situated to help integrate complementary or alternative (CAM) therapies into conventional primary care, creating a more holistic model that can better address health through prevention and management of chronic disease.[13,15-19] In light of the unique challenges faced by this region and in support of the integration of the naturopathic profession, there are many considerations that need to be taken into account to enact effective change in the healthcare sector. These considerations include past efforts, ongoing colonialism, the unique needs of northern Ontario's populations, and the ND scope of practice.

BACKGROUND

One contributor to the poor health outcomes seen within northern Ontario is the supposed inability to provide adequate services attributed to the geographical expanse and factors such as transportation logistics, community isolation, and high costs[20]; however, there are many more factors that impact the health outcomes that exist in northern Ontario. Such factors include the proximal determinants of health, such as access to nutritious, culturally-relevant, and reasonably priced foods,[20,21] safe and affordable housing,[22,23] and educational opportunities that meet the needs of the local populations. More specifically seen in this region are issues relating to inadequate access to housing[2,24]; creation of a boom–bust economy by mines, leading to changes in resources provided to residents of mining towns and migration of residents into and out of towns as their economies fluctuate[25]; increased need for social services and primary care capacity[2]; and social exclusion by healthcare providers and the general public.[2] As Dr. Sarita Verma (Northern Ontario School of Medicine University President and CEO) purports, "poverty, rising inequality in income and assets, and social exclusion all drive the widening and deepening health inequalities in northern Ontario."[26]

Colonialism and Indigenous Health Considerations

While urban communities in northern Ontario also experience discrepancies in access to health care, the communities in rural and remote northern Ontario experience significantly higher rates of preventable adverse health outcomes. Due to the large proportion of Indigenous Peoples living in northern Ontario, the impact of colonization and ongoing colonialism and its manifestations in the form of geographic isolation on reserves, the maintenance of the Indian Act, and the Non-Insured Health Benefits (NIHB) system cannot be ignored.[2,27] Ongoing colonialism and exacerbated inequities in access to healthcare services have resulted in significant differences in health outcomes between Indigenous and non-Indigenous Peoples in Canada.[1,2]

While health disparities are exacerbated in northern Ontario compared with the southern regions of the province, significant disparities in equity and access to health care exist for Indigenous communities across Ontario. In Canada, 22% of the Indigenous population lives within Ontario.[28] Northern Ontario is home to 106 First Nations communities, with 22% of northwestern Ontario's and 11% of northeastern Ontario's population being Indigenous.[2] Although there exist commonalities, such as holistic philosophies regarding health, use of ceremony, and plant medicines, amongst Indigenous communities, each community has its own distinct traditions, customs, and unique approaches to and conceptualizations of health and well-being.[29]

Indigenous knowledge about and perspectives on health and wellness are not incorporated into mainstream health care, and experiences of individual and systemic racism within health care contribute significantly to the health inequities experienced by Indigenous Peoples.[7,30] Indigenous ancestry remains listed among the social determinants of health, indicating that simply being Indigenous can significantly impact health status.[31] However, it is

important to note that ancestry does not inherently impact health but that, in fact, health is impacted by the marginalization and discrimination of populations by those in positions of power. Identifying Indigenous identity as a contributor to poor health is now strongly cautioned against, which demonstrates a recognition of the systemic barriers within health care which result in skewed health outcomes.[1,2]

Addressing Inequity in Access to Primary Care in Indigenous Communities

We acknowledge that any recommendations about healthcare delivery to First Nations communities must be modified, co-developed, and implemented by First Nations communities to be respectful of Indigenous self-determination and to take into account the difference in healthcare funding streams. In the following paragraphs, we explore the rationale for naturopathic medicine's potential usefulness to Indigenous communities.

Integrative interprofessional healthcare teams providing care to First Nations communities have the potential to be a viable and effective solution to address inequity in access to health care. It is a solution shown to be of great benefit in other areas[32,33] due to the alignment of epistemologies and ontologies of "health" between naturopathic medicine, and Indigenous concepts of health and wellness.

Whole-person care that takes into consideration the integration of body, mind, and spirit is central to Indigenous concepts of health and wellness, as well as being central to the foundations of naturopathic medical philosophy.[18,34-37] As Dr. Johanne McCarthy, ND, a member of the Onondaga Nation of Six Nations, who serves as the Director of Academic Programs at Six Nations Polytechnic and practices naturopathic medicine in Ontario, and others have pointed out, a philosophical and practical alignment appears to exist between Indigenous concepts of health and naturopathic medicine[18,36] (Johanne McCarthy, N.D., email communication, April 4, 2022). In addition, several prominent NDs in Ontario believe that the naturopathic profession's focus on holistic care, patient empowerment, and getting to the root cause of illness primes NDs to engage in dismantling racism and other forms of discrimination, advocating for Indigenous patients, and contributing to the decolonization of medicine[38] (Johanne McCarthy, N.D., email communication, April 4, 2022; Howie Owens, email communication, April 11, 2022). More importantly, Indigenous patients accessing naturopathic medicine have expressed that this intervention fits well with their own cultural concepts of health by viewing body, mind, and spirit as interconnected and getting to the root cause of disease.[18,36] A key study highlights how naturopathic medicine can help address the healthcare needs and preferences of Indigenous Peoples in Canada:

> Findings from the qualitative research study indicate that the naturopathic clinic at Anishnawbe Health Toronto (AHT) achieved positive patient outcomes and addressed the specific health needs of this population in a way that was not met by other traditional or conventional HCPs. Upon evaluation and analysis of common themes at Aboriginal Health Access Centres and after comparison with actual delivery of care, a clear imbalance between the desire for and accessibility to health promotion and prevention programs and the provision of holistic care was revealed. This imbalance could be corrected through the implementation of naturopathic medicine.[18]

In light of the close alignment of epistemologies between naturopathy and Indigenous health and healing, continued implementation of such integrative care is necessary for advancing Indigenous health. Canada, as a signatory to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), has already committed to advancing the health and well-being of Indigenous Peoples through Indigenous-led and desired initiatives.[39] This includes, but is not limited to, the right to all social and health services free of discrimination and the establishment that Indigenous Peoples have a right to the "highest attainable standard of physical and mental health."[39]

The key factors for improving Indigenous access to primary care have long been overlooked, while focus has instead centred on healthcare modalities that fit the western euro-centric health paradigm and silence traditional knowledge and practices.[34] From what can be seen through published[18,36] and anecdotal (e.g., Johanne McCarthy, N.D., email communication, April 4, 2022) sources and the move towards Indigenous-led health care in Canada,[29] the integration of NDs into primary healthcare teams within northern Ontario may be helpful in advancing Indigenous rights in health and health care. Specifically, if the services of NDs are deemed valuable by Indigenous communities, then these services should be fully funded and available to all Indigenous Peoples across northern Ontario.

Health Care Provider Shortages in Northern Ontario

At least 1 million people in Ontario do not have regular access to primary care resources; this shortage is particularly acute in northern and rural areas.[4] To address HCP shortages, Ontario has implemented initiatives such as multiple strategies to recruit and retain physicians,[5,40] the establishment of Family Health Teams, and Nurse Practitioner-Led Clinics[41] as well as the founding of the Northern Ontario School of Medicine in 2005.[42-44]

Despite these initiatives, there is currently a shortage of 100 family doctors and 130 specialists in northern Ontario alone.[4] This is particularly concerning as primary care physicians serve as the first point of healthcare access within the healthcare system, and access to alternative providers, such as nurse practitioners, is still uncommon in most provinces.[45] In rural and remote communities where access to primary care is available, traditional family practices experience challenges meeting the needs of patients with multiple chronic conditions and comorbidities.[46]

Additionally, with the refined vision for primary care focusing on prevention and health promotion, physicians need time allotted within their busy schedules to accommodate such work.[46,47] In rural and remote communities, physicians report working increased hours yet see fewer patients[48] (presumably to support local hospitals or provide locum work for the nearest fly-in

community), and nurses who commonly provide health education and preventive services are limited to providing direct patient care in busy clinics.[49] In northern Ontario, while the focus of primary care should be on health prevention and promotion, in practice it appears to be focused on curative approaches and coping with the current strain on the healthcare system. Rural and remote communities not only experience shortages with respect to family physicians as reviewed above; in addition, these communities experience challenges recruiting and retaining nursing professionals.[46,50-52] Consequently, initiatives have explored the integration of additional regulated HCPs, such as pharmacists and paramedics, into primary healthcare settings, highlighting that increased collaboration across the professions may be beneficial.[53-55]

Integration of NDs into health teams across northern Ontario can help bring prevention and health promotion interventions to the forefront of everyday work in primary care teams; they are a resource in public health work, bridging patients to more direct clinical interventions when integrated into public health settings.[16,56] Several benefits, including the provision of more coordinated and multidimensional patient-centred care, have been found when allopathic and naturopathic providers work together.[57] In this interprofessional collaborative model, providers can learn from each other and gain a better understanding of each profession's scope of practice and value for the circle of care. An example of a successful multidisciplinary clinic is Lakehead University's Student Health and Wellness Centres in northern Ontario. Both main campuses, located in Thunder Bay and Orillia, have NDs working in partnership with the allopathic health team to offer primary health care to students, with great success and popularity.[58,59]

Inclusion of NDs in Primary Care

Naturopathic doctors are highly trained primary HCPs licensed and regulated in the province of Ontario to offer whole-person care and treat the root causes of illness using a wide range of evidence-based natural and conventional therapies.[17,60] Naturopathic doctors complete 8 years of post-secondary education, the final 4 years of which cost at least $25,800 per year in tuition alone, and yet the median salary for an ND in Canada is only $60,000 per year based on working 39 hours per week.[61,62] A 2015 survey of NDs found that average debt load upon graduation was $167,000. However, it is now estimated to be closer to $250,000, especially when considering the debt carried over from undergraduate studies.[63,64] Upon graduation, most NDs establish a medical practice which is run as a business that bills patients for service via a combination of insurance payments and cash.[62,65] This model of care delivery necessitates time and money spent on marketing and outreach in order to attract patients, who are primarily wealthier and have access to extended health benefits or the available income to pay for naturopathic services.[65] Given the debt load of many newly graduated NDs, financial incentives for recruitment into northern communities, which have not made a significant impact with the recruitment of physicians,[40] may promote the recruitment of NDs into these areas and should be considered.

Naturopathic doctors wishing to enter the workforce and use their medical skills and training to help people do not have the same opportunities as medical doctors and nurse practitioners to do so—spending years recruiting patients to their private practices.[64] In Canada, only 6% of NDs report working full-time or part-time in a hospital, community health clinic, or non-profit organization.[62] In British Columbia, some naturopathic services are covered under the medical services plan (MSP) for low-income individuals, but there is no coverage in Ontario under the Ontario Health Insurance Plan (OHIP), severely limiting the number of patients who can access these services.[66,67] Currently, there are 1,733 registered NDs in Ontario, with an estimated 100 new registrants each year.[1] Furthermore, it is important to highlight that unlike medical doctors and nurse practitioners, NDs have limited opportunities for salaried positions upon graduation and, as a result, experience limited opportunities for employment outside of sole practitioner entrepreneurship. At present, NDs, and particularly new graduates who have yet to set up a practice, represent a significant untapped resource in terms of highly trained regulated primary HCPs capable of delivering low-cost holistic and prevention-focused primary care in the province of Ontario.

Although it is regulated within the province of Ontario, the naturopathic scope of practice may differ from provider to provider. For instance, while all NDs complete 8 years of post-secondary education, some may continue to complete additional training to expand their scope of practice, such as to acquire prescribing abilities. In Ontario, 773 NDs (approximately 45% of the profession) have met the standard of practice for prescribing, which allows NDs to prescribe certain substances classified as drugs.[11] This is a significant point of consideration when discussing the integration of NDs into health teams, as their scope of practice and their training is comparable to that of mainstream practitioners (refer to Table 1 and Table 2).

CONCLUSION

Despite the implementation of innovative solutions to address the issue, lack of access to comprehensive, culturally appropriate primary care in northern Ontario continues to persist. With much of the evidence pointing to a shortage of HCPs, long wait times, and poor recruitment and retention of staff, there is a need to bolster the workforce numbers. Integration of NDs into interprofessional health teams is a potential solution that can positively impact the issues currently present in northern Ontario primary care. Naturopathic medicine has great potential to address primary healthcare needs.[15] In addition to treating acute and chronic conditions, NDs engage in health promotion and prevention of disease.[60] Naturopathic medicine has the potential to become a "disruptive innovation" in health care due to its ability to address primary healthcare needs, particularly chronic diseases, such as depression and diabetes, without the use of expensive pharmaceutical and surgical interventions, while also providing highly qualified professionals to bolster the primary care workforce.[15]

TABLE 1 Comparison of medical doctor, nurse practitioner and naturopathic doctor education within Canada

Professional Title	Type of Degree	Years of Education	Curricular Focus	Clinical Experience Requirement
Naturopathic Doctor (ND)	Naturopathic Doctor (post-graduate)	4-year degree with prerequisite of completion of bachelor's degree	• Biomedical sciences • Clinical sciences • Naturopathic therapeutics • Traditional Chinese medicine • Acupuncture • Botanical medicine • Clinical nutrition • Homeopathic medicine • Physical medicine • Health psychology and lifestyle psychology • Health promotion and disease prevention • Professionalism and ethics • Research appraisal and application • Identifying the need for urgent and emergent healthcare • Chronic disease management • Interprofessional collaboration	1200 hours
Medical Doctor (MD)	Doctor of Medicine (second entry undergraduate)	4-year degree with prerequisite of completion of bachelor's degree	• Biomedical, behavioural, social sciences • Curriculum across the life cycle • Scientific method/clinical/translational research • Critical judgement/problem-solving skills • Societal problems • Cultural competence and healthcare disparities • Medical ethics • Communication skills • Interprofessional collaboration	No set amount of time. Often takes place in the last year or two years of the 4-year period, in tandem with classes.
Nurse Practitioner (NP)	Master of Science in Nursing, Nurse Practitioner	2-year degree with prerequisite of completion of Bachelor of Science in Nursing and minimum of 2 years of full-time registered nursing practice	• Developmental and life stages • Pathophysiology • Psychopathology • Epidemiology • Infectious diseases • Behavioural sciences • Demographics and family processes • Interprofessional collaboration • Research appraisal and application to evidence-informed practice • Therapeutics • Pharmacology	Minimum of 700 hours of direct clinical practice (outside of lab time)

TABLE 2 Comparison of nurse, nurse practitioner and naturopathic doctor scopes of practice within Ontario

Procedure	Nurse	Nurse Practitioner	Naturopathic Doctor	Naturopathic Doctor with Prescribing Rights and IV License
Venipuncture	Yes	Yes	Yes	Yes
Intramuscular injections	Yes	Yes	No	Yes
Intravenous	Yes	Yes	No	Yes
Communicating a diagnosis	No	Yes	Yes[a]	Yes
Soft tissue manipulation[b]	No	No	Yes	Yes
Joint manipulation[c]	No	No	Yes	Yes
Acupuncture	No	No	Yes	Yes
Prescription of drugs	No	Yes[d]	No	Yes[e]
Full physical exam	Yes	Yes	Yes	Yes
Health promotion	Yes	Yes	Yes	Yes
Casting a bone fracture	No	Yes	No	No
Mental health counselling	Yes[f]	Yes	Yes[g]	Yes
Ordering and interpreting lab tests	Order only	Yes[h]	Yes[i]	Yes

[a] NDs may communicate a "naturopathic diagnosis"
[b] Comparable to massage performed by registered massage therapists
[c] Comparable to joint manipulations performed by chiropractors
[d] If the required nurse practitioner controlled substance education is completed
[e] May prescribe but very limited set of medications that have been outlined in their professional scope
[f] Both nurses and nurse practitioners are regulated to perform counseling using "psychotherapy techniques" within Ontario
[g] NDs perform "lifestyle counseling" as per their professional regulations with Ontario
[h] Nurse practitioners may only order tests that are covered under OHIP within Ontario
[i] NDs may order any lab tests and have additional labs that may be ordered that fall specifically within their scope of practice and within Ontario

Adding NDs to the primary healthcare options available can also further the work that is being done to integrate holistic forms of healing and healthcare such as the inclusion of traditional healers and Indigenous medicines into healthcare settings.[18,29] Through NDs' evidence-informed use of plant medicine and therapies, as well as their focus on the body's natural abilities to heal itself and the connection between the physical, mental, and spiritual aspects of healing, NDs can provide cost-effective and, in some instances, culturally relevant care for healthcare systems and Indigenous Peoples respectively[18,36,56] (Johanne McCarthy, N.D., email communication, April 4, 2022).

As mentioned previously, NDs, although regulated in the province of Ontario, are not covered under OHIP and, as such, work in a fee-for-service setting, often attracting patients of higher socioeconomic status. Integration into a Family Health Team or other interprofessional health team such as a Nurse Practitioner–Led Clinic, would need to account for service fees and make ND-provided services accessible, especially to patients who have been historically made vulnerable by the healthcare system. Further considerations for integration include role clarification between providers and between patients and providers[72]; communication between providers within the health team[12,73]; and working on foundational lifestyle approaches that "fill in the gaps" in conventional primary care[74,75] and endorse a more coordinated, collaborative, culturally responsive, inclusive, and accessible system of care.

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ACKNOWLEDGEMENTS

The authors thank Dr. Helle Møller, Associate Professor at Lakehead University for her guidance, support, and insightful feedback throughout the development and completion of this project.

CONFLICTS OF INTEREST DISCLOSURE

We have read and understood the *CAND Journal*'s policy on disclosing conflicts of interest and declare that we have none.

FUNDING

This research did not receive external funding.

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Analgesic Effect of Hydrotherapy: A Narrative Review of Current Evidence

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ABSTRACT

Pain is a primitive human instinct that alerts the body's defense mechanism to prevent damage. Hydrotherapy is the most common modality of treatment used for pain management in naturopathy. This review aims to scientifically evaluate the analgesic effects of hydrotherapy used for pain management. A thorough literature search from inception (1 January 1946) until 16 March 2022 was performed with electronic databases such as Scopus, Embase, PubMed/MEDLINE using the keywords "Hydrotherapy" OR "Balneotherapy" AND "Pain" OR "Analgesic effect." Seven articles were identified in total. The available evidence suggests hydrotherapy to have significant analgesic effects, attributed to the physical and thermal properties of water.

Key Words Balneotherapy, naturopathy, pain management.

INTRODUCTION

Pain is a primitive human instinct, a distressing sensation linked to actual or potential tissue damage. Pain alerts the body's defense mechanism to react to a stimulus that is causing tissue damage.[1] The sensation of pain is associated with the activation of primary afferent fibres, which include un-myelinated C-fibre and myelinated Aσ-fibre. Both nociceptors remain inactive in the absence of pain and are activated in response to a noxious stimulus. Pain perception occurs in three stages, (1) pain sensitivity, (2) transmission of signals from the periphery to the dorsal horn of the spinal cord – the centre, (3) transmission of signals to higher centres of the brain for integration.[2] Although pharmacological interventions reduce pain, adverse effects of medications have been reported.[3] Hydrotherapy is the external or internal use of water in any of its forms (packs,[4] immersion baths,[5] steam baths,[6] douches,[7] compresses,[8] fomentation,[9] and temperature [as water, ice, steam]) at varying pressures, durations, and sites for health promotion or treatment of various diseases.[10] The thermal, chemical, and physical properties of water are used for the management of various conditions such as arthritis,[11] multiple sclerosis,[12] diabetes mellitus,[4] hypertension,[13] fibromyalgia,[14] migraine,[15] bronchial asthma,[9] and neuralgia.[16] Hot and cold applications activate three sensory receptors located immediately beneath the skin, namely cold receptors, warmth receptors, and pain receptors (stimulated only by applying extreme degrees of hot or cold).[2]

Analgesic Effect of Cold

Cold application, in general, decreases skin and muscle temperature and reduces blood flow through sympathetic vasoconstriction. Cold-induced decrease in blood flow reduces swelling and slows down the migration of inflammatory mediators, thereby reducing inflammation. The application of cold produces a local anesthetic effect through three main mechanisms: decreasing the activation of nociceptors, decreasing nerve conduction velocity which transmits pain, and activating the transient receptor potential cation channel subfamily M member 8 (TRPM8). TRPM8 is a cold-sensitive ion channel that could contribute to the analgesic effect through activation of group II/III metabotropic glutamate receptors (inhibitors of nociceptive responses).[17]

Analgesic Effect of Heat

Similar to cold application, the analgesic effects of the application of heat are mediated through the transient receptor potential (TRP) membrane channels. Specifically, the TRP vanilloid 1 (TRPV1) receptor conducts the sensation of heat and also regulates antinociceptive pathways in the brain. Heat application also enhances the supply of nutrients and oxygen and the removal of pain-inducing mediators produced as a by-product of tissue damage.[17]

Analgesic Effect Mediated Through Proprioceptors

Apart from the nociceptive action, topical application of hot and cold water activates specialized nerve endings called proprioceptors. Proprioceptors detect changes in movement and pressure

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To cite: Deenadayalan B, Venugopal V, Poornima R et al. Analgesic effect of hydrotherapy: A narrative review of current evidence. *CAND Journal*. 2022;29(4):12-15. https:/doi.org/10.54434/candj.123

Received: 12 July 2022; **Accepted:** 21 October 2022; **Published:** 15 December 2022

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inside the tissue. Proprioceptor activity inhibits the transmission of nociceptive signals to the brain.[18] This current review aimed to report the scientific and evidence-based analgesic effect of hydrotherapy for pain management.

MATERIALS AND METHODS

A literature search was performed in electronic databases such as Scopus, Embase, PubMed/MEDLINE using the key words "Hydrotherapy" OR "Balneotherapy" AND "Pain" OR "Analgesic effect." A total of seven articles were found from inception (1 January 1946) until 16 March 2022. Quasi-experimental studies, randomized controlled trials, case reports, and case series that focus on hydrotherapy and pain management were included. Research protocols, commentaries, and articles that used hydrotherapy along with physical exercise and studies published in languages other than English were excluded. The reference sections of systematic reviews and meta-analyses was also assessed for any possible studies that would meet the inclusion criteria.

RESULTS

The literature search identified seven potential articles for this review. The characteristics of the included studies are detailed in Table 1.

Literature Characteristics

A total of seven studies, conducted in Newcastle, Lithuania, Finland, India, and Iran, were included in this review.[7,15,19-23] A total of 592 participants were enrolled in the study who were suffering from different sorts of pain: blue bottle sting, chronic inflammatory arthritis, migraine, postpartum pain, musculoskeletal pain, diabetic peripheral neuropathy, and primary dysmenorrhea. Among the included studies there were five randomized controlled trials (RCTs)[7,15,19,22,23] and one cross-over study.[20] No details about the study design were given for the seventh study. All the studies used hydrotherapy as their intervention, with a minimum duration of two minutes and up to one hour. For assessment, four studies used a visual analog scale (VAS),[15,19,20,22] one study used a McGill questionnaire,[23] one study used a McGill questionnaire and VAS,[7] and one study used a numerical rating scale (NRS). [21]

Risk of Bias

Cochrane risk of bias was used to assess the risk of bias of the included RCT. Out of five studies[7,15,19,22,23] regarding random sequence concealment, all five studies were rated low risk, four studies rated low risk in allocation concealment,[15,19,22,23] blinding of participants, and personnel reporting, three studies[15,19,22] rated low risk, all studies rated low risk in incomplete outcome data and selective outcome. There was no information in any of the studies about other sources of bias.

Intervention Results

Loten et al.[19] reported that hot water immersion showed better results when compared with ice pack application for pain management in blue bottle sting. They included 96 participants, of whom 88 completed the trial. Study group patients (n=49) received hot water immersion at 45°C and the control group patients (n=47) had ice pack application. A VAS was used to assess pain severity.

TABLE 1 Effects of hydrotherapy on various painful conditions

Author, year	Sample size	Study design	Participants	Intervention duration	Measurement scale	Conclusion
Loten et al., 2006[19]	T=96	RCT	Individuals with blue bottle sting	Hot water immersion (45°C) of affected body parts for 20 min.	Pain by using VAS	Hot water immersion bath reduces pain in patients affected with blue bottle sting.
Hinkka et al., 2017[20]	T=121	Cross-over study	Individuals with chronic inflammatory arthritis	Cold mist shower twice a day (morning and evening) for 2 mins.	Pain by using VAS	After cold mist shower, reduction of pain score in patients with chronic inflammatory arthritis.
Sujan et al., 2016[15]	T=40	RCT	Individuals with migraine	Hot arm and foot bath (103°F–110°F) for 20 min, simultaneous ice massage to head, scalp with ice bag for 5 mins, given 5 days a week for 6 weeks.	Pain by using VAS	Hot arm and foot bath and ice application simultaneously reduces pain in patients with migraine.
Batten et al., 2017[21]	T=45	Not reported	Women with postpartum pain	30-min warm water (37°C–38°C) immersion bath at 1 hour postpartum	Pain by using NRS	After warm water immersion bath, a significant reduction in pain was reported.
Rapolienė et al., 2019[22]	T=145	RCT	Individuals with musculoskeletal pain	Mineralized water bath for 20 min/day, 5 days a week for 2 weeks	Pain by using VAS	After a mineralized water bath, a reduction of pain in patients with musculoskeletal pain was reported.
Vakilinia et al., 2020[23]	T=60	RCT	Individuals with diabetic peripheral neuropathy	Warm water with 250 g of mineral salt foot bath (40°C–45°C) for 15 min, given for 1 month, before bedtime	McGill questionnaire	A warm saltwater foot bath reduces pain in patients with painful diabetic peripheral neuropathy.
Rahmania et al., 2021[7]	T=68	RCT	Women aged 18–22 years with primary dysmenorrhea	Full-body douche for 8 mins/day for 20 days, neutral at 92°F–97°F at a pressure of 0.5–7 bar.	McGill questionnaire, VAS	After full-body neutral douche, a significant reduction of pain was noted.

RCT = randomized controlled trial; T = total; VAS = visual analog scale; NRS = numeric rating scale.

After 20 minutes of intervention, 87% of the hot water immersion group reported having less pain, while only 33% reported having less pain in the ice pack group.

Hinkka et al.[20] reported that cold mist showers showed a reduction in pain in patients with inflammatory arthritis. They included 121 participants in the study. Participants received a cold mist shower for 2 minutes once in the morning and evening for 5 days. A VAS was used to assess pain severity. Results showed a significant reduction in pain and, also, an improvement in the quality of sleep. The study concluded that a cold mist shower was found to be effective in the management of pain in inflammatory arthritis.

Sujan et al.[15] reported that 40 migraine patients were enrolled. Patients in the intervention arm received a hot arm and foot bath (103°F–110°F) and an ice massage to the head daily for 20 minutes for 45 days. The control arm received usual pharmacological care. Using a VAS to assess pain severity, they found that there was a more significant decrease in frequency and intensity of headache with hydrotherapy and pharmacotherapy than with pharmacotherapy alone. They concluded that hydrotherapy increases vagal tone along with a reduction in frequency and intensity of headaches in migraines.

Batten et al.[21] reported on 45 postpartum women who received hydrotherapy in the form of an immersion bath with warm water of (37°F–38°F). Pain before the bath was assessed using a numeric rating scale (NRS). During an intervention of 30 minutes, an assessment was made at 3 time points: baseline assessment, 15 minutes into the bath, and at 30 minutes. They found that hydrotherapy could be an effective intervention for postpartum pain management and also enhanced the birth experience.

Rapolienė et al.[22] reported on 145 participants with musculoskeletal disorder who received 20 minutes of bath, 5 days a week for 2 weeks. This study consisted of 5 groups: 3 groups received baths with different levels of mineralized water (20, 40, and 60 g/L total dissolved solids), one group received tap water, and one was a control without intervention. A VAS scale was used to assess pain severity after the mineral bath. They concluded that mineral water is more efficient than tap water in pain reduction.

Vakilinia et al.[23] reported on 60 patients with diabetic peripheral neuropathy who participated in the study. In the 3-arm trial, the first arm received a warm foot bath at 40°C–45°C for 15 min/day for one month before bedtime, the second arm received 250 grams of mineralized warm foot bath at the same temperature as the first arm. The third arm was the control group, without intervention. Assessment was made through the douleur neuropathique questionnaire, the McGill pain questionnaire, and the World Health Organization brief quality of life questionnaire at baseline and one month after the intervention. They concluded that a saltwater foot bath was efficient in reducing pain in patients with diabetic peripheral neuropathy.

Rahmania et al.[7] reported that a neutral temperature douche (92°F–97°F) with a pressure of 0.5–7 bar reduced pain associated with primary dysmenorrhea. They included 68 participants, of whom 60 completed the trial. Study group patients (n=34) received the douche 20 minutes a day for 20 days, and control group patients (n=34) received the usual care. The McGill pain score and VAS were used to assess pain severity. Results showed that the neutral douche group had a reduction in pain compared with the control group.

DISCUSSION

The purpose of this review is to show the analgesic effect of hydrotherapy on pain. The intensity, duration, and frequency of the pain experienced by a patient affects the psychological state as well as social rapport and day-to-day activities. In short, pain directly influences the quality of life of a patient.[24] Patients leaned towards the use of complementary and integrative medicine, as outcomes were insufficient despite advances made in medical care to manage chronic pain. Patients feared the use of the analgesic drugs and their adverse effects.[25] A previous review stated that moderate to high-quality evidence is available to show the efficacy of hydrotherapy on pain and joint mobility in patients with rheumatic diseases, hip osteoarthritis, and lower back pain.[26] The previous review included studies with aquatic exercises, or water physiotherapy, whereas in this review, we focused exclusively on hydrotherapy treatment based on the temperature of water and duration of the treatment. This review includes recent studies done with hydrotherapy or balneotherapy alone and explored the possible physiological mechanism. However, the available literature showed only subjective improvements, and further studies with objective measurement for pain management would add more strength to our findings. To confirm our results, RCTs are required with revised methodologies and intervention procedures specifically designed for various disease conditions.

CONCLUSION

Based on available scientific evidence, this review suggests that hydrotherapy can be used effectively in various conditions for pain management. Further studies are required to determine the optimal frequency and duration of treatment and assess the sustained benefit following cessation of the intervention.

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ACKNOWLEDGEMENTS

Not applicable.

CONFLICTS OF INTEREST DISCLOSURE

We have read and understood the *CAND Journal*'s policy on conflicts of interest and declare that we have none.

FUNDING

This research did not receive any funding.

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From Roots to Research: A Research Strategy for the Naturopathic Profession in Europe

Amie Steel,[1] **Cherie Caut,**[1] and **Tina Hausser**[2,3]

ABSTRACT

Naturopathy is a traditional medicine system originating in Europe and is practiced in 108 countries worldwide, representing the most geographically diverse traditional medicine in the modern era. However, the European roots of the naturopathic profession are still prevalent, with just over half of the international population of naturopathic practitioners in European countries. Despite the history and size of the naturopathic profession in Europe, only 8.8% of the more than 2000 peer-reviewed research publications produced by naturopathic researchers in the last 30 years are based on studies conducted by researchers in Europe. In 2019, representatives from the World Naturopathic Federation (WNF) European Regional Group met in Lyon, France, to develop a strategy for naturopathy research in Europe. Attendees represented naturopathic organizations in France, Belgium, Spain, Ireland, and the Czech Republic. The outcome was a co-designed strategy based on shared ideas and goals, linked to implementation activities. The goals for the first four years were: (1) Establish research capacity through research training and infrastructure; (2) Strengthen research training and infrastructure; (3) Secure continued research capacity through formalized research training in naturopathic courses; (4) Establish research-sustainability through university-level naturopathic education. While the COVD-19 pandemic has delayed the timeline of initiating this strategy, the priorities, goals, and planned activities remain the same for the WNF European Regional Group. The strategy not only reflects a vision for the future of the profession in Europe, it also reflects an acknowledgement that the European naturopathic community is not only the custodian of the historical roots of the global naturopathic profession but also has an important role to play in its future.

Key Words Naturopathy, naturopathic medicine, health workforce, capacity-building.

INTRODUCTION

Naturopathy is a traditional medicine system originating in Europe, with Germany recognized as the traditional home to naturopathy.[1] While naturopathy was first codified in the late 1800s, it draws upon knowledge about health and healing arising from much earlier times.[2] Despite its European roots, naturopathy is currently practiced in 108 countries worldwide, and represents the most geographically diverse traditional system of medicine of the modern era.[1] The global naturopathic profession consistently identifies core philosophies and principles that underpin clinical care; however, the specific therapeutic tools employed in naturopathic practice are influenced by local cultural, historical, and regulatory factors, resulting in some modalities being considered core to practice in certain locations (e.g., yoga in India, homeopathy in Europe, acupuncture in Canada) yet used less frequently elsewhere.[1]

In Europe, naturopathy is practiced in more than 30 countries and the naturopathic profession includes over 60,000 (of the global total of 110,000) naturopathic practitioners.[1] Despite the history and size of the naturopathic profession in Europe, only 8.8% of the more than 2000 peer-reviewed research publications produced by naturopathic researchers in the last 30 years represent studies conducted by researchers in Europe.[3] This disparity may be due, in part, to the regulatory and educational environment of the European naturopathic profession: ten countries have regulatory mechanisms in place for the naturopathic profession and eleven countries offer a total of 36 naturopathic educational programs.[1] Of these courses, there are only four known European examples of naturopathic institutions establishing research institutions, or naturopathic practitioners with research qualifications being housed in leading national and international research centres focused on naturopathy. In contrast, there are nine naturopathic programs in North America and seven research centres meeting these criteria.[3] This difference may be in part due to the naturopathic educational programs in Europe being delivered by private providers and existing outside of the established university sector. As such, they have limited access to research infrastructure and training, which hinders research capacity-building in Europe.

This gap affects the advancement of Europe's naturopathic profession, as research training is a critical component of a profession's

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To cite: Steel A, Caut C, Hausser T. From roots to research: A research strategy for the naturopathic profession in Europe. *CAND Journal*. 2022;29(4):16-18. https:/doi.org/10.54434/candj.128

Received: 28 September 2022; **Accepted:** 25 October 2022; **Published:** 15 December 2022

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ability to communicate findings from practice, examine the evidence underpinning practices, and build evidence-informed practitioners. The North American naturopathic professional community collaborated in 2006 to develop an agenda for advancing naturopathic medical research.[4] Their efforts were focused on identifying key research questions that naturopathic research and researchers were well-placed to answer. These important efforts were not, however, aimed at advancing the research capacity of the naturopathic profession in any one world region. This article presents a strategy developed by representatives of the World Naturopathic Federation (WNF) European Regional Group with the aim of building a strong future for naturopathic research in their region.

World Naturopathic Federation European Regional Group Research Strategy Meeting

In 2019, representatives from the WNF European Regional Group met in Lyon, France, to develop a research strategy for naturopathy in Europe. Attendees represented naturopathic organizations in France, Belgium, Spain, Ireland, and the Czech Republic (see Table 1). The meeting was facilitated by Dr. Amie Steel, from the Australian Research Centre in Complementary and Integrative Medicine (University of Technology Sydney, Australia). Over the course of the one-day meeting, Dr. Steel presented a model for understanding research capacity, and the participants explored the naturopathic research environment in Europe. They then co-designed a strategy based on shared ideas and goals. The participants then applied these foundational principles to develop strategic goals and implementation activities. A summary of these final outcomes is provided below.

TABLE 1 Representatives contributing to the WNF European Regional Group Research Strategy Meeting

Attendee	Organization	Country
Anne Portier	OMNES	France
Maïté Diharce	OMNES	France
Fatiha Aït Saïd	ISNAT	Belgium
Tina Hausser	OCN FENACO	Spain
Dr. Maria Makeeva	OCN FENACO	Spain
Dr. Alioune Diaw	FENA	France
Marian Mulligan	Sphenoid Ireland CLG/Irish Institute of Naturopathic Medicine	Ireland
Kate Boesenberg	Škola Klinické Naturopatie	Czech Republic
Dominick Leaud-Zacohval	Aesculape Ecole Libre de Naturopathie	France
Facilitators	**Organization**	**Country**
Dr. Amie Steel	Australian Research Centre in Complementary and Integrative Medicine, University of Technology Sydney	Australia
Cherie Caut	Australian Research Centre in Complementary and Integrative Medicine, University of Technology Sydney	Australia

WNF: World Naturopathic Federation; OMNES: Organisation de la Médecine Naturelle et de l'Éducation Sanitaire; ISNAT: Institut Supérieur de Naturopathie Traditionnelle; OCN FENACO: Organización Colegial Naturopática – Federación Española de Asociaciones de Naturópatas; FENA: Fédération Française de Naturopathie.

Priorities and Planning Areas

The professional representatives agreed they needed to set 10-year priorities for the European region. These were:

1. Identifying steps to establish research pathways from existing naturopathic programs for graduates.
2. Developing and providing research training opportunities for naturopathic practitioners in the region (i.e., research skills development workshops).
3. Identifying Europe-based naturopathic practitioners with appropriate qualifications, strong written English skills, and an interest in pursuing a research career, and fostering these practitioners to become "Research Champions" for the region.
4. Establishing practice-based research networks in the region.

From these longer-term priorities, the meeting participants agreed on five immediate priorities:

1. Explore opportunities to build research training into the curriculum
2. Expose faculty to more research opportunities
3. Create bridges and partnerships between colleges and universities
4. Identify and foster "Research Champions"
5. Identify and offer research funding from the professional organizations to support naturopathic research that benefits research capacity.

These immediate priorities were then translated into specific goals and activities over four years (see Table 2).

Year 1

In the first year, it will be important to establish research capacity through research training and infrastructure. Key activities to achieve this goal include providing targeted research training skills workshops for faculty and locally identified "Research Champions." Further to this, infrastructure-building activities are also needed. These include developing guidelines for the professional associations to provide research funding, building patient-reported outcome measures into the academic clinics of naturopathic programs, and exploring collaborative arrangements between organizations and institutions to facilitate journal database access.

Year 2

The focus in the second year is on strengthening research capacity through funding and external partnerships. This requires establishing a WNF Research Subcommittee for Europe and identifying and connecting with researchers in European universities interested in naturopathy. Building on the Year 1 activities, the WNF

TABLE 2 European Naturopathic Research 4-year strategic plan

Year	Goals	Activities
1	Establish research capacity through research training and infrastructure	1. Provide research training skills workshop for faculty and local "Research Champions" 2. Develop guidelines for research funding from the profession 3. Build patient-reported outcomes measures into academic clinics 4. Investigate the logistics of journal database access
2	Strengthen research capacity through funding and external partnerships	1. Establish a WNF Research Subcommittee for Europe 2. Identify and connect with researchers in European universities interested in naturopathy 3. Apply for funding (1 x grant) 4. Establish a pooled funding arrangement among European WNF members
3	Secure continued research capacity through formalized research training in naturopathic courses	1. Develop research subjects for undergraduate naturopathic clinical courses 2. Develop reciprocal training arrangements for research skills among European educational institutions
4	Establish research sustainability through university-level naturopathic education	1. Establish a naturopathic university with research training embedded in the curriculum

WNF: World Naturopathic Federation

European Regional Group will also develop a pooled research fund to support research activities in the region. The existing naturopathic researchers will also collaborate with international naturopathic researchers and non-naturopathic researchers in Europe where appropriate, to apply for funding through an existing grant scheme.

Year 3

The goal for the third year is to secure continued research capacity through formalized naturopathic research training in naturopathic programs. For this to occur, the regional representatives will develop research subjects to include in undergraduate clinical programs and develop reciprocal training arrangements for research skills among educational institutions delivering naturopathic training in Europe.

Year 4

The fourth year aims to establish research sustainability through university-level naturopathic education. For this to occur, the WNF European Regional Group professional and educational members will collaborate to establish a naturopathic university with research training embedded in the curriculum.

CONCLUSION

The WNF European Regional Group Research Strategy Meeting represents a first attempt for representatives of the naturopathic profession in the European Region to identify priorities and goals, underpinned by specific activities, to build regional research capacity and activity. While the COVD-19 pandemic has delayed the timeline of initiating this strategy, the priorities, goals, and planned activities remain the same for the WNF European Regional Group. The strategy not only reflects a vision for the future of the profession in Europe, it also reflects an acknowledgement that not only is the European naturopathic community custodian of the historical roots of the global naturopathic profession, it also has an important role to play in its future.

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ACKNOWLEDGEMENTS

Thank you to the professional representatives who contributed to the meeting which generated this strategy. Thank you also to *Aesculape Ecole Libre de Naturopathie* for providing a venue for the meeting, and to the World Naturopathic Federation for contributing catering.

CONFLICTS OF INTEREST DISCLOSURE

We have read and understood the *CAND Journal*'s policy on conflicts of interest and declare that we have none.

FUNDING

This research did not receive any funding.

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