Establishing an international research collaborative for naturopathy: the International Research Consortium of Naturopathic Academic Clinics

Abstract

Naturopathy is a system of healthcare through which practitioners apply core philosophies, theories and principles to integrate medical knowledge with natural treatment options. In recent years the naturopathic community has developed a stronger international coherence. Alongside this growing connectivity in the global naturopathic profession, there have been a number of calls for more systematic research attention to be devoted to naturopathy as a substantive research topic, as well as a need for the naturopathic profession to hone a culture of research and evidence-based practices and skillsets. Progress in this area has been made through the development of more pragmatic and whole systems naturopathic research. One aspect which is currently missing in the global naturopathic research landscape despite this growing pattern of practice-based, whole systems research is the application of international multicentre research projects. In response, we have established a research consortium for naturopathic academic clinics in four countries and across multiple world regions. This paper serves to overview the mission, scope and membership of the research consortium and explore some of the research designs and questions which it may support.

Keywords: naturopathy; pragmatic research; clinical research; complementary therapies; integrative medicine; multicentre clinical trials
Background

Naturopathy is a “system of healthcare with a deep history of traditional philosophies and practice”\(^1\) through which practitioners integrate medical knowledge with natural treatment options.\(^1\) While naturopathy originated in Germany, the profession is now practiced in every region of the world.\(^2\) As a profession, naturopathy is defined by core philosophies, theories and principles.\(^1\) These elements manifest in a clinical practice approach to treatment that is holistic and as such naturopathy is characterised by this approach more so than the specific treatments prescribed by the practitioner.\(^3\)

In recent years the naturopathic community has developed a stronger international coherence, most clearly in evidence through the formation of the World Naturopathic Federation (WNF).\(^4\) The efforts of the WNF to date have been extensive and include the first attempts to understand the practice approach of naturopaths internationally as well as measure the coherence in the naturopathic practice in different countries. The first reports produced by the WNF identify consistency in the application and practice of naturopathic principles and philosophies.\(^5\)

More recent research by the WNF indicates there is consistency in the inclusion of naturopathic definitions, history, philosophy and theories in naturopathic education programs worldwide.\(^6\) Other subject areas which are covered in all known naturopathic programs are basic sciences, clinical sciences, naturopathic disciplines and clinical practicum.\(^6\) However, there is some diversity in the amount of time dedicated to each subject area within the naturopathic curriculum of each educational institution. There is also variability in other aspects of the naturopathic programs including the number of contact hours and the diagnostic methods and treatments taught within naturopathic courses. Despite these differences, there is some consistency in naturopathic training programs within and between world regions. For example, there are naturopathic academic institutions in North America, Asia and Western Pacific world regions that offer naturopathic programs 4000 hours or longer and represent the most lengthy programs for the profession globally.\(^6\) The most common naturopathic modalities taught in these regions are nutrition and botanical medicine.\(^6\)

The emerging strengths in naturopathic research globally

There have been a number of calls for more systematic research attention to be devoted to naturopathy as a substantive research topic, as well as a need for the naturopathic profession to hone a culture of research and evidence-based practices and skillsets.\(^7\) Alongside these calls, important initiatives such as the Practitioner Research and Collaboration Initiative (PRACI)\(^10\) have arisen which support the study of the real life practice of naturopathy and outcomes of naturopathic care.\(^11\) PRACI has the capacity to support sub-studies employing a range of research designs and
methods including clinical trials, observational studies, qualitative projects and case series/studies. However, despite its valuable contribution to naturopathic practice-based research - both current and future - the infrastructure of PRACI is restricted to the study of naturopathy in Australia.

Whole systems research has received increasing attention and support from health researchers including among those focusing on complementary medicine clinical care. Whole systems research has evolved alongside the movement towards pragmatic research in the wider health research community, and can be considered a variation on the popular pragmatic research with a goal of being more applicable to real world settings. Of note, is that not all comparative effectiveness research is pragmatic and that randomized controlled trials may indeed be pragmatic in so far as they incorporate real world elements, such as broader inclusion criteria, and the use of complex interventions. Whole systems research emphasises the importance of evaluating the outcomes of complex treatment approaches that have foundations on a system of care rather than centring on a specific treatment intervention. In line with this, whole systems research has also been promoted as a clinical research framework which may have relevance to the study of naturopathy whereby it is argued to hold value due to naturopathy’s principles-based system of care. Early signs suggest this approach may have some value, when applied correctly, to evaluating the effects of the complex dynamics inherent within naturopathic clinical care with a number of studies examining the outcomes of naturopathic care for a range of health conditions (e.g. Seely 2013). However, these studies have primarily been single centre studies based in North America and as such have a limited value in informing policy or practice in other world regions.

The need for international multicentre naturopathic research

One aspect which is currently missing in the global naturopathic research landscape despite this growing pattern of practice-based, whole systems research is the application of international multicentre research projects. The wider health research community emphasise the randomised clinical trial and comparative effectiveness study as the premier clinical research designs for answering questions of efficacy and effectiveness respectively. Yet there is still a requirement that findings from any clinical study are replicated in other settings before the finding is accepted and supported. While single centre trials do have a number of advantages related to expediency and logistics, these studies are also at risk of limited external validity, implausible effect size, and unequal allocation of resources. As a result, it is not unusual for single centre trials to be contradicted by subsequent studies.

In an attempt to offset the limitations of single centres trials, there are increasing calls within health and medical research for the conduct of multicentre clinical studies (i.e. any clinical trial where there
is more than one site through which the study is conducted) as they are argued to provide additional rigour to the existing clinical trial study design. Multicentre clinical trials strengthen the external validity of research findings, provide more sensitive information regarding effect size, and may compensate for issues regarding clinician blinding. Furthermore, the value of multicentre research is not limited to clinical trials, encompassing observational studies and other research designs which benefit from data collected in a clinical setting.

Academic teaching clinics may be uniquely positioned to serve as research nodes for international multicentre whole systems naturopathy research. The advent of comparative effectiveness research (CER) as an important research design within health research and policy environments has presented a number of implications and opportunities for academic centres as sites for pragmatic research. These include challenges to professional cultural views (e.g. the interface between tradition and science; delineating culturally relevant evidence-based interventions), availability of and access to resources, and training of both faculty and students in applicable research methods. Many of the naturopathic teaching institutions have academic faculty, research departments and ethics officers which can be leveraged by their clinics for logistical, administrative, and ethical oversight support.

Early work conducted at some of the existing naturopathic academic clinics has demonstrated capacity, interest and experience in research that is foundational to CER, health services research, and electronic data collection and management. Also, as the primary training centres for future naturopathic clinicians, integration with regular and embedded research programs may help strengthen an already growing culture of research in the international naturopathic community.

Therefore, we have established a research consortium for naturopathic academic clinics in four countries and across two world regions. This paper serves to overview the structure of the research consortium and explore some of the research designs and questions which it may support.

Establishing the International Research Consortium of Naturopathic Academic Clinics

The research consortium was first conceived in January 2017 during planning meetings for a collaborative research project which was undergoing expansion from the United States into Australia and Canada. The project expansion was inspired by the research team’s involvement in the International Naturopathy Research Leadership and Capacity Building Program run by the Australian Research Centre in Complementary and Integrative Medicine (University of Technology Sydney).

As a direct result of these collaborative discussions a benefit was identified for the establishment of infrastructure which supports a multicentre international study design for the conduct of this and any future research project in naturopathy. Our proposed solution is an International Research Consortium of Naturopathic Academic Clinics (IRCNAC). The Consortium aims to bring together
naturopathic educational institutions with common goals and in so doing amplify the benefits of
collaboration across institutional and geographical boundaries. The structure of the Consortium
centres on a core mission to which all members subscribe, a clear scope of activity, and defined
criteria for membership.

Mission

The purpose of the Consortium covers three core areas (see Figure 1). Firstly, we are committed to
advancing international research in the naturopathic profession. Alongside important advances such
as the World Naturopathic Federation, the Consortium matches the growing strength in the
international naturopathic community. As links between practitioner communities in different
countries develop and strengthen, simultaneous links between researchers in these countries is not
only advantageous but vital for advancement of the profession.

Secondly, we intend to support collaborative relationships between researchers affiliated with
naturopathic academic clinics. Building on the important foundations of the International
Naturopathy Leadership and Capacity Building Program this initiative will support the formation of
relationships between naturopathic educational institutions in general, and naturopathic academic
clinics in particular. The international naturopathic academic community will benefit from the
increased collaboration and connection which is facilitated by the structure of the Consortium. In
part the manifestation of this mission will also include leveraging the research strength within some
naturopathic academic institutions to support and grow naturopathic research capacity and activity
in other institutions less developed in research skills and infrastructure.

Lastly, but no less importantly, we commit to enabling the efficient conduct of international
multicentre research projects through naturopathic academic clinics. The advantages of
international research projects in naturopathy has already been described, as have the logistical
challenges often faced by research teams looking to establish international multicentre trials. It is
hoped that the Consortium will reduce the burden on researchers planning trials in more than one
country.

Scope: Area and Method of Cooperation

While collaboration is at the core of the Consortium’s mission, the member organisations are first
and foremost educational institutions for the next generation of naturopathic practitioners. For this
reason, we have defined clear areas and methods of cooperation which are respectful of each
member’s independence. The area of cooperation includes any research project offered by any of
the members determined to be desirable and feasible for developing cooperative relationships. The
methods of cooperation include, subject to the approval of each member, research activities or
programs such as research collaborations, exchange programs, resource sharing, and joint applications for funding.

Criteria for Membership

The Consortium operates through formal relationships between educational institutions which provide supervised clinical training in naturopathy. Institutions are eligible to join the Consortium if they offer training programs for naturopaths which comply with their respective regional accreditation requirements and the standards for Education Membership set by the World Naturopathic Federation.

Founding Members

The formation of the consortium was the impetus of representatives of Endeavour College of Natural Health in Australia, Bastyr University in the United States of America, and The Canadian College of Natural Medicine in Canada. These members developed the Memorandum of Understanding document which forms the foundation of the Consortium and extended an invitation to other institutions in their regions. The outcome of this work is a Consortium that spans two world regions, four countries and represents eight naturopathic educational institutions (see Table 1). Plans are in place to extend this membership to include a third world region.

Research Opportunities

As the program unfolds and initial research trials are executed, we expect lessons learned, the adoption of methodological advances, and centralized resource use to maximize the efficiency of future trials. As institutional experience grows within and is shared among the centres, we expect the feasibility and productivity of the respective research programs to grow exponentially. Research designs foundational to understanding and mapping the profession such as patient and practice characteristics as well as assessments of knowledge/attitudes, engaging experts through Delphi studies or for guideline generation, can all be applied or compared at the international level. We anticipate improved ease and efficiency of planning and conducting large-scale prospective outcome-focussed research similar to the ongoing Canadian/US Integrative Oncology Study (CUSIOS), as well as a wide variety of other relatively underutilized terrain such as mixed methods and qualitative research. The involvement of academic centres has been a key infrastructure requirement for supporting practice-based research networks, as well as adopting best-practices and tools for planning and conducting clinical trials within the context of networks like IRCNAC. Our Consortium is positioned to play an important catalysing role in the evolution prospective research in naturopathic medicine not only within the member organisations, but within the countries and regions where these organisations are located.
Support from the International Profession

The members of the World Naturopathic Federation voted at the 3rd General Assembly in Phoenix, Arizona (USA) to support and endorse the IRCNAC. This decision was based on the value and significance this initiative is expected to contribute to advancing new knowledge in naturopathy at an international level.

Conclusions

Naturopathy is a growing profession in the midst of professionalization and development. Its leaders have underscored the importance of instilling an evidence and research-based culture with the recognition of the limitations of single agent trials in this whole systems based form of medicine. It is our belief that the Collaboration supports this aim and provides an important step in developing the infrastructure and culture needed for the development of a high-quality evidence base respectful of the needs of a whole systems based profession.
References


*Figure 1: Mission of the International Research Consortium of Naturopathic Academic Clinics*
<table>
<thead>
<tr>
<th>Consortium member</th>
<th>Clinic</th>
<th>Location</th>
<th>Number of patient visits*</th>
</tr>
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<tbody>
<tr>
<td>Endeavour College of Natural Health</td>
<td>Wellnation Clinic</td>
<td>Adelaide, South Australia, Australia</td>
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<td></td>
<td></td>
<td>Brisbane, Queensland, Australia</td>
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<td></td>
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<td>Gold Coast, Queensland, Australia</td>
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<td>Melbourne, Victoria, Australia</td>
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<td></td>
<td></td>
<td>Perth, Western Australia, Australia</td>
<td></td>
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<tr>
<td>Bastyr University</td>
<td>The Basyer Center for Natural Health</td>
<td>Seattle, Washington, USA</td>
<td>43,000</td>
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<tr>
<td></td>
<td></td>
<td>San Diego, California, USA</td>
<td></td>
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<tr>
<td>The Canadian College of Naturopathic Medicine</td>
<td>Robert Schad Naturopathic Clinic</td>
<td>Toronto, Ontario, Canada</td>
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<td>Wellpark College of Natural Therapies</td>
<td>Prema Clinic</td>
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<td>300</td>
</tr>
<tr>
<td>South Pacific College of Natural Medicine</td>
<td>Paua Clinic</td>
<td>Ellerslie, Auckland, New Zealand</td>
<td>600</td>
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<td>Southern School of Natural Therapies &amp; Australasian College of Natural Therapies</td>
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<td>Fitzroy, Victoria, Australia</td>
<td>2000</td>
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<td>Southwest College of Naturopathic Medicine and Health Sciences</td>
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</table>

*Estimated number of patient visits for the naturopathic academic clinic in one calendar year