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A Survey of Regulated Naturopathic Doctors in Canada: Demographics, Governance, and Public Understanding

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Naturopathic medicine is now regulated or semi-regulated in six of Canada's seven most populous provinces, yet there has been minimal research on the beliefs and attitudes of naturopathic doctors ("NDs"). This multidisciplinary paper begins with a systematic review of the laws governing naturopathic medicine in Canada's six regulated provinces. It then examines the results from an original dataset based on a 2019 survey of Canadian NDs in the six provinces with some level of regulation. NDs were asked questions about demographics, governance and representation, and the public understanding of naturopathic medicine. Demographically, most respondents were young, female, relatively new to practice, and science-educated prior to entering their naturopathic medical program. In terms of governance, most respondents believe recent regulatory changes have been positive, especially for their patients, though Ontario respondents were the most critical. Likewise, most respondents expressed positive attitudes about their national and provincial promotional organizations, and satisfaction was strongly associated with membership. However, respondents did not believe naturopathic medicine is understood by the Canadian public, medical doctors, and especially the media. For all the integration of naturopathic medicine into provincial legislation governing health professions over the past 15 years, Canadian NDs still perceive that their profession is poorly understood. As naturopathic medicine has become more professionalized across Canada and globally, future health policy and legal researchers should focus on how naturopathic medicine is viewed by patients and other medical professionals within the Canadian health care system.

Introduction

The World Health Organization describes traditional and complementary medicine ("TCM") as "an important and often underestimated health resource".¹ TCM typically refers to health care products, practices, and practitioners that "are not fully integrated into the dominant health care system" and are not considered part of conventional medicine within a given country.² While there is debate regarding the extent to which TCM should be integrated into public health care systems,³ there is little doubt that its use is growing worldwide. Among

TCM professions, naturopathic medicine (also known as naturopathy) has undergone considerable professionalization in the 21st century, especially in Canada. Naturopathic medicine is now regulated or semi-regulated in six of Canada's 10 provinces, with regulatory changes over the last 15 years further integrating the profession into provincial policy structures governing health professions. While some have criticized these regulatory changes for potentially legitimizing unsafe practices,⁴ there has been limited empirical research on the beliefs and

attitudes of Canadian naturopathic doctors (“NDs”) since those policy changes. Existing scholarly surveys of Canadian NDs have either predated regulatory changes or focused on aspects other than regulation.⁵

This paper’s objective is to understand how the regulation of naturopathic medicine is perceived by Canadian NDs themselves. After conducting a systematic review of all laws and policies in Canada’s regulated provinces, it examines the results from a survey of regulated Canadian NDs conducted in 2019. It seeks to answer three questions regarding demographics, naturopathic organizations and regulation, and the public understanding of naturopathic medicine: What are the demographic and educational characteristics of Canadian NDs? How do they perceive the way they are governed and represented? Finally, how well do they believe their profession is understood?

Demographically, the 426 ND respondents were primarily young, female, and science-educated prior to entering their naturopathic medical program. In terms of governance and representation, most respondents believe regulation has been positive, especially for naturopathic patients. Respondents who are not regulated want to be regulated, and those who are currently regulated under their provincial health professions framework support that framework. Respondents were also highly satisfied with their promotional associations, both at the provincial and national level. However, respondents displayed a strong belief that naturopathic medicine is not well understood by the Canadian public, medical doctors, and especially the Canadian media.

This study offers several empirical and theoretical contributions for better understanding the role of naturopathic medicine in Canadian and international health care systems. Empirically, it is the first scholarly study to systematically review and analyse the laws and policies concerning naturopathic medicine in the Canada’s six regulated provinces,

to determine how many regulated NDs are practicing in Canada, to isolate naturopathic attitudes toward regulation after that regulation occurred, and to explore attitudes from Canadian NDs from outside the province of Ontario. Theoretically, the survey data contributes to understanding the relationship between policy design, the implementation of health policies regulating TCM, and social perceptions of health care professions. Although the survey data show respondents were generally satisfied with regulation, NDs’ perception that they are not well understood by medical doctors and the media provides further evidence that naturopathic medicine ought to be understood as a “repressed structural interest” in the Canadian health care system, existing outside the public health care system in perception and in practice.⁶ Future scholarship in public policy, bioethics, and the health sciences should explore how dominant actors in the health care system, namely medical doctors, perceive naturopathic medicine and interact with naturopathic doctors.

This paper unfolds as follows. First, I define the scope and regulation of naturopathic medicine in Canada and distinguish between the various forms of legal and associational governance in the six provinces with some level of regulation. After a brief explanation of the survey methods, I discuss the survey results, in particular responses regarding demographics, promotional associations, regulation, and the public understanding of naturopathic medicine. I then discuss the paper’s theoretical and empirical contributions, before concluding with an exploration of the future directions for scholarship pertaining to naturopathic medicine in Canada and abroad.

Defining the Scope and Regulation of Naturopathic Medicine in Canada

The Canadian Association of Naturopathic Doctors defines naturopathic medicine as “a distinct primary health care system that blends modern scientific

knowledge with traditional and natural forms of medicine”.⁷ According to Bradley, *et al.*,⁸ naturopathic medicine shares a foundation with traditional western medicine in terms of biomedical physiology and diagnostics. However, it de-emphasizes prescription drugs and surgical interventions and emphasizes preventative techniques, health promotion, physical activity, herbal medicine, and homeopathy—the latter of which is especially controversial, including among many NDs.⁹ Naturopathic medicine is defined by a set of six guiding principles: first do no harm; the healing power of nature; identify and treat the causes; doctor as teacher; treat the whole person; and prevention.¹⁰ Although the terms “naturopathy” and “naturopathic medicine” are typically used interchangeably in Canada, this paper uses the latter term for clarity, as it is most commonly used by the naturopathic organizations being discussed.

In Canada and the United States, naturopathic medical programs must be accredited by the Association of Accredited Naturopathic Medical Colleges. All Canadian and American naturopathic medical programs must fulfil requirements set by the Council on Naturopathic Medical Education, an accrediting body. There are five accredited naturopathic medical programs in the United States and two in Canada, although in 2020, the two Canadian programs (the British Columbia-based Boucher Institute of Naturopathic Medicine and the Toronto-based Canadian College of Naturopathic Medicine) announced a merger that would maintain both campuses.¹¹ Prior to entry into the Canadian programs, naturopathic students must have completed a three- or four-year undergraduate university degree, including prerequisite courses in biology, chemistry, and psychology.¹²

The Canadian Association of Naturopathic Doctors (“CAND”) is the national organization that represents Canadian NDs. However, because health care is primarily set by provincial governments, naturopathic scope of practice is determined by a combina-

tion of provincial statutes, provincial regulations, and self-regulatory bylaws created by provincial naturopathic organizations. Among the six provinces with some regulation for naturopathic medicine, provincial policies vary: the three more populous provinces of British Columbia, Ontario, and Alberta have separate promotional associations and self-regulatory colleges (the “college model”), with NDs regulated under the same provincial legislation that governs other health professions; the less populous provinces of Manitoba and Saskatchewan each have a single, self-regulatory body, though both passed laws that will move the profession to the college model; and Nova Scotia, a small province, only has a promotional association but grants title protection to members who are licensed by one of the five regulated provinces. All six provinces grant title protection for terms such as “naturopath” and “naturopathic doctor” to regulated/licensed members only. There are naturopaths who practice in the other four Canadian provinces, but naturopathic medicine is effectively unregulated in those provinces and there is no title protection.

Each of the six provinces with some level of regulation has made recent changes to their naturopathic regulatory structures, with a trend towards the college model (it should be noted that a regulatory “college” is not an educational institution, but instead is the name for the provincial self-regulatory organization that governs an individual health profession). In 2007, only British Columbia had a regulatory college; once the Saskatchewan and Manitoba legislation comes into force, there will be five provinces with a regulatory college. However, scholars have yet to explore how regulation has affected naturopathic practice, nor how NDs perceive their regulatory structure. When Ontario NDs were surveyed prior to that province’s move to the college model, most NDs were supportive of forthcoming regulations, though some were worried about increased financial burdens, a diminishing of scope of practice, and a shift towards a more con-

ventional biomedical model of care.⁹ Post-regulation surveys of Canadian NDs have focused on integration with medical doctors,¹³ naturopathic research,¹⁴ paediatric practice¹⁵ and cancer care.¹⁶ However, little is known about NDs' views toward regulation, policy implementation, naturopathic organizations, and the public understanding of naturopathic medicine.

Methods

Prior to this study, the precise number of regulated NDs in Canada was not known; although CAND claims over 2,400 members, this number includes naturopaths practicing in unregulated provinces without title protection and does not include non-CAND members (membership is optional in many provinces). To determine how many regulated NDs were currently practicing in the six regulated or semi-regulated provinces, a database of active NDs in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, and Nova Scotia was created in Summer 2019. NDs' names were first retrieved from the official online directories of CAND, provincial regulators, and provincial associations, and this list was supplemented using contact information from publicly available websites. After removing those who had retired, passed away, or had duplicate entries, the number of active NDs in the six provinces was determined to be 2,287 as of August 31, 2019.

Survey questions were drafted and sent to every naturopathic association and provincial regulator for feedback. Organizations were then re-notified one week in advance of the survey, a link for which was distributed to NDs via email using Qualtrics XM on October 29, 2019. With one week remaining, NDs were emailed a reminder, and the survey closed on November 26, 2019. After excluding those who could not be contacted electronically, in total 2,248 NDs were emailed the survey. Because the survey was voluntary and only available to those for whom an individual or clinic email address was available, the possibility of volunteer bias exists. The survey received ethics approval from

the University of Guelph Research Ethics Board (REB #18-08-022) and was conducted in accordance with the Canadian Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans. Informed consent was obtained from all human participants and responses were anonymous.

The survey was divided into three sections. The first section asked demographic and educational questions; the second section focused on naturopathic organizations and regulation; and the third asked respondents about the public understanding of naturopathic medicine. Depending on their selected primary province of practice, respondents were asked between 31-35 questions, which included open-ended text boxes, multiple choice, and a five-point Likert scale from "strongly agree" to "strongly disagree". Apart from selecting their primary province, no questions were mandatory, and respondents were given the option of selecting "NA / cannot answer" to all non-text box questions; those responses are excluded from the tables below. Once the survey was complete, data was analyzed quantitatively using SPSS Statistics software. Qualitative content from the text responses was analyzed and coded using Braun and Clarke's thematic analysis, a method for identifying and reporting patterns within a dataset.¹⁷ The analysis below focuses primarily on quantitative results from the multiple choice and Likert questions, though some qualitative text responses are discussed briefly.

Results

In total, 426 NDs completed the survey, a 19.0% response rate. Most respondents (83%) practiced in Ontario and British Columbia, the two most populous regulated provinces. Table 1 shows the sample is broadly representative of the population of NDs in the six provinces, although respondents from Ontario and Manitoba are slightly underrepresented while those from British Columbia, Alberta, Saskatchewan, and Nova Scotia are slightly overrepresented.

Table 1							
Active NDs vs. Respondents							
	BC	AB	ON	SK	MB	NS	Total
Active NDs (% of total)	601 (26.3%)	199 (8.7%)	1354 (59.2%)	39 (1.7%)	33 (1.4%)	61 (2.7%)	2287 (100%)
Respondents (% of total)	131 (30.8%)	39 (9.2%)	223 (52.3%)	9 (2.1%)	5 (1.2%)	19 (4.5%)	426 (100%)
Net % difference	+4.5%	+0.5%	-6.9%	+0.4%	-0.2%	+1.8%	

Respondents were asked about their education before, during, and after their naturopathic medical program. Most respondents (95.3%, n=406) had completed at least an undergraduate degree prior to their naturopathic education. Nearly two-thirds of respondents (65.3%) had a Bachelor of Science prior to entering, with a Bachelor of Arts (15.3%) and Kinesiology (10.3%) the next-most common degree types. Five respondents (1.2%) had obtained a medical doctorate (MD) outside of Canada before entering their naturopathic medical program, and 15 respondents (3.5%) had completed or were in the process of completing a master's degree after their naturopathic education. Most respondents (90.1%) completed their naturopathic education at a Canadian naturopathic medical program, 71.8% from the Canadian College of Naturopathic Medicine and 18.3% from the Boucher Institute of Naturopathic Medicine. The remaining 9.9% of respondents completed their education at a naturopathic program in the United States.

In terms of gender, 78.5% of respondents identified as female and 21.5% as male; no respondents chose another gender identity. Respondents were young: 58.5% were aged 40 and under, while 87.7% were aged 50 and under. These results were consistent with demographic data collected by naturopathic organizations and other scholars: one 2011-2012 survey of Ontario NDs found 79% of respondents were women, while the 2018 annual report of the College of Naturopaths of Ontario ("CONO") showed 59% of members were aged 40 or under, and 87% were aged 50 or under.¹⁸ This suggests that the sample is broadly rep-

resentative of the overall ND population despite the possibility for volunteer bias.

Most respondents were also relatively new to practice: 31.4% of respondents had been practicing for fewer than five years, and 57.5% had been practicing for fewer than 10 years. Only 11% of respondents had been practicing for 20 or more years. Regional variation for age, gender, and number of years practicing was minimal, with British Columbian respondents slightly older. When cross-tabulating demographic characteristics with the questions described below, there was either no relationship or a very weak relationship. In short, respondents' age, gender, and years of practice did not have a substantive effect on their views about naturopathic organizations, regulation, and the public understanding of naturopathic medicine.

Promotional Associations

Respondents were asked about membership in provincial and national promotional associations. Every respondent in Nova Scotia (where there is a provincial promotional association, but no regulator) and Saskatchewan and Manitoba (where there is a provincial regulator but no promotional association) held membership in their lone provincial organization, which is a provincial requirement to practice. Every respondent from these three provinces (33 total) were also CAND members.

Of the three more populous provinces of Ontario, British Columbia, and Alberta where associational membership is optional, there was some variation. Associational membership was highest in British Co-

lumbia (93.9% in the British Columbia Naturopathic Association and 94.6% in CAND), with Ontario's slightly lower (75.3% in the Ontario Association of Naturopathic Doctors and 76.7% in CAND). The most interesting outlier was Alberta. Every Albertan respondent (39/39) held CAND membership even though it is not mandatory, yet only 43.6% (n=17) held membership in the Alberta Association of Naturopathic Doctors ("AAND"), the provincial association that was only formed in 2018. The recency of the creation of the new provincial organization likely explains the low membership rate. When it came to non-membership, by far the most common reason was cost. Of those who provided text responses, 70.3% (45/64) of respondents cited cost as a reason for not joining CAND, and 74.7% (65/87) cited cost as a reason for not joining their provincial association.

Table 2 describes respondents' attitudes towards their national and provincial promotional associations. After being given a quote from the provincial association's website, respondents from the four provinces with a promotional association (British Columbia, Alberta, Ontario, and Nova Scotia) were

asked whether they agreed that their provincial association "is doing a good job promoting the naturopathic profession". Respondents were generally favourable: 65.2% somewhat or strongly agreed that their provincial association was doing a good job with promotion, compared with 25.1% who somewhat or strongly disagreed (see Table 2). Respondents from British Columbia (83.2%) and Nova Scotia (84.2%) were the most likely to agree, with respondents from Ontario (57.7%) less likely, but still more likely to agree than disagree. Albertan respondents had an equal number of respondents agree (38.5%, n=15) as those who neither agreed nor disagreed (38.5%, compared with 6.7% in the other three provinces), which likely reflects uncertainty over (and low membership in) Alberta's new provincial association. There was a strong relationship (Cramer's $V = .391$, $p < 0.001$) between membership and a belief that the provincial association was doing a good job promoting the profession: 72.8% of members agreed, compared with only 27.1% of non-members. Even in Alberta, where the AAND was new, 58.8% of members agreed the organization was doing a good job promoting the profession, compared with 27.3% of non-members.

	CAND: Good Job Promoting	Provincial Association: Good Job Promoting	CAND Im- proved Public Understanding	Provincial As- sociation Im- proved Understanding
Strongly Agree	22.1%	29.9%	17.1%	17.5%
Somewhat Agree	46.2%	35.3%	49.1%	45.9%
Neither Agree nor Disagree	10.1%	9.7%	16.0%	15.8%
Somewhat Disagree	14.8%	16.3%	12.2%	14.8%
Strongly Disagree	6.8%	8.8%	5.6%	6.1%
	n=426	n=411	n=426	n=412

Similar to the above question, respondents were given a quote from the CAND website and then asked whether the national association was doing “a good job promoting the naturopathic profession”. Over two-thirds (68.3%) of respondents agreed while 21.6% disagreed. Agreement with this statement ranged from 100% in Manitoba to 57.8% in Ontario, demonstrating an overall high level of support for CAND’s promotional activities by province. There was also a strong relationship between membership and agreement that CAND was doing a good job: 72.8% of CAND members somewhat or strongly agreed, versus only 28.8% of non-members ($V = .345, p < 0.001$).

Respondents were also asked whether their provincial and national associations had “improved public understanding of naturopathic medicine”. Again, responses were broadly positive, with some regional variation. For provincial associations, 63.3% of respondents agreed that their association has improved public understanding, and 20.9% disagreed. British Columbian (84%) and Nova Scotian (78.9%) respondents were more likely to agree than those from Ontario (53.8%) and Alberta (41.0%). All four provinces had considerably more respondents agree than disagree, including Ontario (57.7% agree versus 33.3% disagree) and Alberta (38.5% agree versus 23.1% disagree). For CAND, 66.2% of respondents either somewhat or

strongly agreed that the national organization had improved public understanding, while 17.8% somewhat or strongly disagreed.

Regulation and Public Understanding of Naturopathic Medicine

Table 3 describes respondents’ responses to questions about regulation generally and regulatory organizations specifically. Respondents were given a brief statement outlining recent or proposed regulatory changes specific to their province, and then asked two questions: whether those regulatory changes had been “positive or negative for *naturopathic patients in [province]*,” and whether those regulatory changes had been “positive or negative for *your own naturopathic practice*” (emphasis in survey). The regulatory changes differed from province-to-province: respondents from Alberta and Ontario were asked about new regulatory colleges that had been operating since 2012 and 2015, respectively; respondents in Saskatchewan and Manitoba were asked about the forthcoming creation of regulatory colleges that had been legislated but were not yet operational; respondents in Nova Scotia were asked about a future “robust regulatory framework” as advocated by the Nova Scotia Association of Naturopathic Doctors; and respondents in British Columbia, where a regulatory college has existed for decades, were asked about the 2008 *Naturopathic Physicians Regulation* that, among other things, expanded prescribing authority.

Table 3

Regulatory Changes

Regulatory changes “positive or negative for <u>naturopathic patients</u> ”?							
	Existing Changes			Prospective Changes			
	BC	AB	ON	SK	MB	NS	All Provinces
Positive	95.4%	71.8%	56.8%	66.7%	50.0%	100.0%	72.5%
Neutral	3.8%	10.3%	29.6%	33.3%	25.0%	0.0%	18.4%

Negative	0.8%	17.9%	13.6%	0.0%	25.0%	0.0%	9.2%
	n=131	n=39	n=213	n=9	n=4	n=18	n=414
	Regulatory changes “positive or negative for <u>your own naturopathic practice</u>”?						
	Existing Changes			Prospective Changes			
	BC	AB	ON	SK	MB	NS	All Provinces
Positive	85.8%	44.4%	33.3%	44.4%	25.0%	73.7%	53.1%
Neutral	11.8%	25.0%	35.3%	55.6%	50.0%	21.1%	26.8%
Negative	2.4%	30.6%	31.4%	0.0%	25.0%	5.3%	20.1%
	n=127	n=36	n=204	n=9	n=4	n=19	n=399

Because the regulatory changes varied by province, caution should be taken when comparing provincial responses. Nevertheless, Table 3 does demonstrate some trends. First, a majority of NDs felt that regulatory changes were (or would be) positive for their naturopathic patients (72.5% positive, 9.2% negative) and their own naturopathic practice (53.1% positive, 20.1% negative). This is true whether the changes had already occurred or were prospective. Respondents were most positive in British Columbia, where the regulatory changes described were the smallest (adjusting scope of practice rather than creating a new framework). In their open-ended text responses regarding the regulatory changes' effect on patients and practice, respondents were asked to give the “most important reason” for their answer. With respect to patients, protection of the public / patient safety was mentioned the most (by 21.6% of respondents who gave an answer, n=88), with other common positive answers including better oversight, quality control, and professional legitimacy.

Interestingly, many respondents believe that the regulatory changes were positive for naturopathic patients, but negative for their own naturopathic practice. This is especially notable in Alberta (71.8% positive for patients, 44.4% positive for own practice) and Ontario (56.8% positive for patients, 33.3% positive for own practice), the two provinces who became regulated under a college model most recently. Ontario respondents were the most negative about the effect on their own practice, with a roughly three-way split between positive, neutral, and negative. The most common reason for a negative impact on practice in the text responses was decreased scope of practice, which was given by 20.9% (n=76) of respondents who answered, including 33.1% (n=61) of Ontario respondents who answered. Several respondents from Ontario specifically mentioned losing the ability to use specific therapies pertaining to biopuncture, prolotherapy, mesotherapy, and the injection of platelet-rich plasma.

Table 4						
Regulatory Organizations						
Regulator “doing a good job protecting the public interest”?						
	BC	AB	ON	SK	MB	Total
Strongly Agree	67.2%	48.7%	42.6%	77.8%	60%	52.1%
Somewhat Agree	21.4%	38.5%	39.0%	22.2%	40%	32.9%
Neither Agree nor Disagree	5.3%	0%	12.1%	0%	0%	8.4%
Somewhat Disagree	4.6%	2.6%	4.9%	0%	0%	4.4%
Strongly Disagree	1.5%	10.3%	1.3%	0%	0%	2.2%
	n=131	n=39	n=223	n=9	n=5	n=407
Regulator “improved public understanding of naturopathic medicine”?						
	BC	AB	ON	SK	MB	Total
Strongly Agree	13.7%	2.6%	4%	0%	0%	6.9%
Somewhat Agree	31.3%	35.9%	17.5%	55.6%	20%	24.6%
Neither Agree nor Disagree	24.4%	25.6%	29.1%	11.1%	20%	26.8%
Somewhat Disagree	22.9%	20.5%	28.3%	22.2%	40%	25.8%
Strongly Disagree	7.9%	15.4%	21.1%	11.1%	20%	16%
	n=131	n=39	n=223	n=9	n=5	n=407

Respondents from the five fully regulated provinces were also asked about their regulatory organizations. They were first given a quote directly from the regulator’s online material describing its role in protecting patients and/or the public, and then asked whether they agreed if their regulator was “doing a good job protecting the public interest” and whether the regulator had “improved public understanding of naturopathic medicine.” Table 4 shows that respondents

consistently felt their regulator improved the public interest: 85% agreed that their regulator was protecting the public interest, compared with only 6.6% who disagreed. This was consistent across the provinces, with respondents from British Columbia the most positive. However, when it came to whether their regulator had improved public understanding of naturopathic medicine, respondents were far less positive. Only 31.7% somewhat or strongly agreed that

their regulator had improved public understanding of naturopathic medicine, compared with 41.8% somewhat or strongly disagreeing. Ontario respondents were the most likely to disagree. It should be noted that improving the public understanding of naturopathic medicine is more traditionally associated with promotional associations rather than regulators. Nevertheless, the negative responses regarding regulators' improvement of the public understanding of naturopathic medicine do stand in contrast to respondents' responses regarding their promotional associations.

After being prompted with a brief description of the provincial policy that regulates the investigation and

discipline of NDs, respondents from the five fully regulated provinces were then asked whether they were satisfied with their province's process for investigation and discipline. Respondents could choose from three options: satisfied; dissatisfied because the process was *too strict*; and dissatisfied because the process was *not strict enough*. Most respondents (83.6%) who provided a substantive answer were satisfied with the process; 13.1% were dissatisfied because the process was too strict, while only 3.3% of respondents felt that the process was not strict enough. Notably, a high number of respondents (n=70) chose "NA / cannot answer" to this question.

	"The Canadian news media understands naturopathic medicine"	"Canadian media portrayals of naturopathic medicine are fair and balanced"	"Medical Doctors (MDs) understand naturopathic medicine"	"Most Canadians understand naturopathic medicine"
Strongly Agree	0%	0%	0%	0.2%
Somewhat Agree	2.6%	1.6%	6.3%	11.7%
Neither Agree nor Disagree	4.2%	3.3%	9.6%	20.4%
Somewhat Disagree	29.6%	22.3%	43.9%	51.4%
Strongly Disagree	63.6%	72.8%	40.1%	16.2%
	n=426	n=426	n=426	n=426

Finally, respondents were asked whether they agreed or disagreed with whether the following groups "understand naturopathic medicine": the Canadian news media; Medical Doctors ("MDs"); and most Canadians. They were also asked whether they agreed with the statement "Canadian media portrayals of naturopathic medicine are fair and balanced". Table 5 shows that respondents over-

whelmingly disagreed that these various groups/institutions understood naturopathic medicine. Over 93% of respondents disagreed that Canadian news media understands naturopathic medicine, while 95.1% disagreed that media portrayals of naturopathic medicine are fair and balanced. Likewise, 84% of respondents disagreed that medical doctors understand naturopathic medicine,

and 67.6% disagreed with the statement that most Canadians understand naturopathic medicine. These results are discussed below.

Discussion

This study's policy review, database, and survey results provide several empirical and theoretical contributions to understanding the current regulation of naturopathic medicine in Canada. The review of provincial policies governing naturopathic medicine shows that six provinces are either fully or semi-regulated, and that there has been a movement to the college model over the last two decades. The database of naturopathic doctors shows that, as of August 2019, there were approximately 2,287 regulated NDs practicing in Canada. The survey results demonstrate several demographic trends; notably, most Canadian NDs are young and female, and nearly two-thirds of respondents were educated with a Bachelor of Science before they entered their naturopathic medical program.

The survey results also provide the first glimpse into how NDs view naturopathic organizations and regulation more generally. Respondents were quite positive about their promotional associations: approximately two-thirds agreed that their national organization was doing a good job promoting naturopathic medicine (68.3% agree, 21.6% disagree) and had improved public understanding (66.2% agree, 17.8% disagree) of the profession. Numbers were similar for provincial associations, with British Columbian and Nova Scotian respondents the most positive. Notably, Ontario respondents were the most likely to disagree that all three organizations—CAND, the Ontario Association of Naturopathic Doctors, and the provincial regulator, CONO—had improved public understanding, suggesting more generalized organizational dissatisfaction among NDs practicing in Canada's most populous province.

Overall, respondents were positive about their regulatory framework: NDs currently regulated under a

college model (British Columbia, Ontario, and Alberta) support that model; NDs whose province is moving to a college model (Saskatchewan and Manitoba) support that move; and NDs whose province is not fully regulated (Nova Scotia) support a “robust regulatory framework” for their province. Majorities agreed that regulatory changes had been or would be positive for naturopathic patients (72.5% positive, 9.2% negative) and for their own naturopathic practice (53.1% positive, 20.1% negative); that their regulator protects the public interest (85% agree, 6.6% disagree); and that their provincial rules for investigation and discipline were satisfactory (83.6% satisfied, 16.4% dissatisfied).

One especially notable finding concerns the difference between whether respondents agreed that provincial regulatory changes were positive or negative for naturopathic patients (72.5% agree) compared with their own naturopathic practice (53.1% agree). Some NDs clearly believe that regulatory changes that benefit the public do not benefit them professionally. In their qualitative responses, many NDs agreed that the regulations had protected the public, increased standards of care, and increased the legitimacy of the profession. By contrast, NDs who disagreed that regulations would be good for their own practice most frequently mentioned a reduced scope of practice (20.9% of respondents who answered), increased costs (9.9%), and increased restrictions (4.1%). These responses reflect the bioethical trade-offs that health professionals face when it comes to regulation, as financial and professional autonomy for individual practitioners does not always align with the public interest. Future qualitative studies should explore specifically which aspects of regulation NDs (and other health professionals) believe are in patients' best interest, but not necessarily in their own professional self-interest.

The last set of findings regard the public understanding of naturopathic medicine. Even though respondents agreed that their promotional organiza-

tions had improved understanding of naturopathic medicine, 95.1% did not believe that media portrayals of naturopathic medicine are fair and balanced. My previous research has found that naturopathic medicine was “subject to far more negative than positive social constructions in Canadian newspapers” between 2013-2017, particularly in the *Globe and Mail*, one of Canada’s two national newspapers.¹⁹ More recent articles about naturopathic medicine in Canada’s other national newspaper, the *National Post*, were publicly criticized by naturopathic organizations and municipal politicians for inaccurate reporting.²⁰ In their open-ended text responses explaining why they felt the media did not understand naturopathic medicine, 22 NDs (5.9% of those who offered an answer) specifically mentioned the *National Post*, and 30 (8.1%) mentioned the Canadian Broadcasting Corporation, Canada’s public broadcaster. There is clearly a sense among Canadian NDs that national media outlets do not portray their profession accurately.

Likewise, a vast majority of respondents disagreed (84%) that medical doctors (MDs) understand naturopathic medicine, a finding that complements Meyer’s study of the integration of NDs and MDs in Ontario. Meyer surveyed NDs and their patients, and found NDs viewed integration with MDs as beneficial, particularly with respect to effectiveness in diagnosis and patient convenience. However, nearly two-thirds of Meyer’s ND respondents (64.7%) said they have received some form of hostility from MDs, and 94.1% claimed MDs do not understand what NDs do and/or the rigorousness of their training. Meyer also surveyed patients of NDs, who believed that the lack of integration was in part due to MDs’ “often negative views towards naturopathic approaches and/or the very different philosophies of MDs and NDs”.²¹ However, our results did show minor evidence of collaboration between NDs and MDs in Canada: in the open-ended text responses, 23 respondents (6.5% of those who provided an answer) indicated that some—though not

most—MDs understand naturopathic medicine, with the following answer representative of that view: “Some MDs seem to understand naturopathic medicine, in large part, but many seem to have only minimal understanding of the profession”. Future research ought to explore where, when, and to what extent this collaboration between NDs and MDs is happening in Canada.

Overall, the survey results suggest that even as NDs view regulation positively, they do not believe this has translated into accurate portrayals of their profession in the media or among MDs. For all the policy changes over the past 15 years, and despite the fact that they believe their own promotional organizations have improved public understanding of naturopathic medicine, Canadian NDs thus still exhibit the characteristics of a “repressed structural interest” rather than a “dominant structural interest” in the Canadian health care system, perceived as lacking in medical legitimacy by dominant medical actors and by the media.²²

Conclusion

In addition to providing a systematic review of the laws and policies regulating naturopathic medicine in the Canadian provinces, this multidisciplinary study sought to survey regulated NDs in Canada to better understand three things: the demographics and education of NDs; their views on representation and governance; and their views on how well the public understands naturopathic medicine. Demographically, respondents were primarily young, female, relatively new to practice, and most likely to have entered their naturopathic medical program with a Bachelor of Science degree. Respondents were generally positive about the role played by their promotional associations and regulatory bodies. However, the vast majority of respondents did not believe the media, medical doctors, and the Canadian public understand naturopathic medicine.

These results demonstrate the need for scholars of health policy to further explore the regulation, edu-

cation, and practice of naturopathic medicine in Canada and internationally. One limitation of this study was that it did not explore naturopathic *practice*—what naturopathic doctors do, what they are taught, and which diagnostic tools and treatments they use. Future research on naturopathic medicine, whether in the form of surveys or in-depth interviews, can and should explore these questions, including whether and how naturopathic practice has substantively changed due to new regulations in Canada and elsewhere. This study also demonstrates the need to isolate naturopaths as a distinct profession in order to foster better understanding about how they are trained and governed. Much recent scholarship has examined naturopathic medicine as part of a broader study on TCM, including those with different scopes of practice such as homeopaths, chiropractors, and midwives.²³ While naturopathic medicine is certainly part of TCM, the recent professionalization and growth of the profession highlights the need for naturopathic medicine to be studied as a unique object of inquiry.

This study also highlights the importance of hearing directly from health professionals. While past scholarship using Canadian NDs' websites has provided valuable information about the way they advertise their practice,²⁴ it is crucial for future scholarship to speak with regulators, associations, and NDs themselves to measure naturopathic practice and beliefs about how the profession operates and how regulations have affected that operation. Given the similar curriculum for schools in Canada and the United States accredited by the Association of Accredited Naturopathic Medical Colleges, comparative survey research on the regulation and attitudes of regulated NDs in the United States would provide an opportunity to explore whether similar policy trends exist in each country. Recent comparative research has begun in this vein, with Dunn, *et al.* finding considerable regulatory heterogeneity across the world, but also finding that juris-

dictions with regulatory frameworks have higher standards.²⁵

Another avenue for research is the extent to which the profession copes with internal divisions about what naturopathic medicine should be. NDs have long been subject to “in-fighting between self-identified naturopaths of different persuasions... which has for a long time weakened their public identity and their political impact”.²⁶ Such a split—between those concerned regulations would move the profession away from its naturalistic roots, and those who want the profession to become more evidence-based and integrated with biomedicine and pharmacology—has been highlighted by previous studies of Canadian NDs.²⁷ Recent interview research has similarly suggested that the younger generation of North American NDs are more “science-oriented” and likely to view evidence-based medicine as an essential part of their practice.²⁸

While the survey data presented here did not find evidence of a generational divide regarding views on regulation, it confirmed that the profession in Canada is quite young and that respondents were most likely to enter their naturopathic medical program with a Bachelor of Science degree. Moreover, the desire for a movement away from more controversial aspects of naturopathic medicine's past and present has manifested in recent scholarship. A group of scholars including several NDs have publicly argued for naturopathic medicine to adopt a seventh principle—*scientia critica*, the ability to critically analyse accumulated knowledge—to guide the training and practice of naturopathic medicine in North America.²⁹ Those scholars critiqued the “legacy of vaccine hesitancy [that] may remain in some quarters of the naturopathic profession”, while other NDs have recommended that naturopathic medical programs should de-emphasize homeopathy due to a lack of scientific evidence for its utility beyond placebo.³⁰ Especially insofar as provincial standards of practice increasingly prevent NDs from offering vaccine alternatives—indeed, NDs can administer vaccines in

British Columbia—future scholarship should explore the interaction between generational differences, regulations, and changes in naturopathic policy and practice. Moreover, the tremendous medical breakthrough that emerged with the development of COVID-19 vaccines in 2020 provides an opportunity for scholars to see how naturopathic organizations and NDs themselves have responded to emerging technological vaccine developments in a post-COVID-19 world.

Across the country and across the world, naturopathic medicine is becoming increasingly professionalized and regulated. As the conventional health care system faces growing issues surrounding funding and physician shortages, and as an increasing number of patients visit NDs, the role of legal regimes in permitting or proscribing naturopathic medicine in health care delivery will only continue to grow. Those who research at the intersection of medicine, law, and public policy should continue to examine naturopathic medicine to understand more about its role in health policy, management, and delivery.

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1. World Health Organization, *WHO Global Report on Traditional and Complementary Medicine 2019*, <<https://www.who.int/publications/i/item/978924151536>> (Accessed October 16, 2021), 5.
2. World Health Organization, *Global Report*, 8, *ibid*.
3. Timothy Caulfield, *et al.*, “Health misinformation and the power of narrative messaging in the Public Sphere” (2019) 2:2 *Canadian Journal of Bioethics* 52-60; Blake Murdoch, Stuart Carr and Timothy Caulfield, “Selling

falsehoods? A cross-sectional study of Canadian naturopathy, homeopathy, chiropractic and acupuncture clinic website claims relating to allergy and asthma” (2016) 6:12 *BMJ Open*: e014028.

4. Blake Murdoch, Timothy Caulfield and Robyn Hyde-Lay, “Commentary: An Examination of the Public Justifications for the Expansion of Canadian Naturopaths’ Scope of Practice” (2011) 19 *Health Law Journal* 215-236; Peter McKnight, “Message to naturopaths: magic isn’t medicine”, *The Globe and Mail* (9 May 2016), <<https://www.theglobeandmail.com/opinion/message-to-naturopaths-magic-isnt-medicine/article29929971/>> (Accessed August 20, 2021); Timothy Caulfield, “Don’t legitimize the witch doctors”, *National Post* (22 January 2013) <<https://nationalpost.com/opinion/timothy-caulfield-dont-legitimize-the-witch-doctors>> (Accessed August 20, 2021); Alheli Picazo, “Alberta shares the blame”, *National Post* (24 March 2016) A11-12.
5. Heather Boon, “Canadian naturopathic practitioners: holistic and scientific world views” (1998) 46:9 *Social Science & Medicine* 1213-1225. doi: 10.1016/s0277-9536(97)10050-8 [hereinafter, “Boon, Canadian naturopathic practitioners”]; Nadine Ijaz, *et al.*, “Supportive but ‘worried’: Perceptions of naturopaths, homeopaths and Chinese medicine practitioners through a regulatory transition in Ontario, Canada” (2015) 15 *BMC Complementary and Alternative Medicine* 312 [hereinafter, “Ijaz, Supportive but worried”]; Stephen P. Meyer, “Naturopaths in Ontario, Canada: Geographic patterns in intermediately-sized metropolitan Areas and integration implications” (2017) 14:1 *Journal of Complementary and Integrative Medicine* [hereinafter, “Meyer, Naturopaths in Ontario”] 1-13; Marja J. Verhoef, Heather Boon and Donatus R. Mutasingwa, “The scope of naturopathic medicine in Canada: An emerging profession” (2006) 63 *Social Science & Medicine* 409-417.
6. Jeremy Ng, “The regulation of complementary and alternative medicine professions in Ontario, Canada” (2020) 9 *Integrative Medicine Research* 12-16 [hereinafter, “Ng, The regulation of complementary and alternative medicine”]; Dave Snow, “The social construction of naturopathic medicine in Canadian newspapers” (2019) *Policy Studies* 1-21, doi: 10.1080/01442872.2019.1704234 [hereinafter “Snow, The social construction of naturopathic medicine”].
7. Canadian Association of Naturopathic Doctors, “Common questions”, <<https://www.cand.ca/common-questions-about-naturopathic-medicine/>> (Accessed August 20, 2021).
8. Ryan Bradley, *et al.*, “Naturopathy as a model of prevention-oriented, patient-centered primary care: a disruptive innovation in health care” (2019) 55:9 *Medicina* 603-616.
9. David H. Nelson, *et al.*, “The bell tolls for homeopathy: time for change in the training and practice of North American naturopathic physicians” (2019) 24 *Journal of*

- Evidence-Based Integrative Medicine 1-11 [hereinafter, “Nelson, The bell tolls for homeopathy”]; Jonathan E. Prousky, “Repositioning individualized homeopathy as a psychotherapeutic technique with resolvable ethical dilemmas” (2018) 23:4 *Journal of Evidence-Based Integrative Medicine* 1-4.
10. Association of Accredited Naturopathic Medical Colleges, “The Six Principles of Naturopathic Medicine”, <<https://aanmc.org/6-principles/>> (Accessed August 20, 2021).
 11. Boucher Institute of Naturopathic Medicine, “Merger Establishes a Global Leader in Naturopathic Medical Education and Research in Canada”, November 17, 2020, <<https://binm.org/blog/merger-establishes-a-global-leader-in-naturopathic-medical-education-and-research-in-canada/>> (Accessed October 16, 2021).
 12. Monique Aucoin, *et al.*, “Naturopathy Special Interest Group Research Capacity and Needs Assessment Survey” (2019) 25:2 *Journal of Alternative and Complementary Medicine* 189-195 [hereinafter “Aucoin, *et al.*, Naturopathy Special Interest Group”].
 13. *Supra*, note 5, Meyer, “Naturopaths in Ontario”.
 14. *Supra*, note 12, Aucoin, *et al.*, “Naturopathy Special Interest Group”.
 15. Antony Porcino, *et al.*, “Pediatric training and practice of Canadian chiropractic and naturopathic doctors: a 2004–2014 comparative study” (2017) 17:512 *BMC Complementary and Alternative Medicine* 1-8.
 16. Dugald Seely, *et al.*, “Naturopathic oncology care for thoracic cancers: a practice survey” (2018) 17:3 *Integrative Cancer Therapies* 793-805.
 17. Virginia Braun and Victoria Clarke, “Using thematic analysis in psychology” (2006) 3 *Qualitative Research in Psychology* 77-101.
 18. Ijaz, *et al.*, “Supportive but Worried”, *supra*, note 5; College of Naturopaths of Ontario [CONO], *Protecting the Public. Supporting Safe Practice: Annual Report 2017-2018* (2018): <<https://cono.wpengine.com/wp-content/uploads/2020/11/2017-2018-CONO-Annual-Report.pdf>> (Accessed August 20, 2021).
 19. Snow, “The social construction of naturopathic medicine”, 12, *supra*, note 6.
 20. Sharon Kirkey, “Naturopathy is poised to ‘disrupt’ health-care status quo, proponents of controversial practice say,” *National Post* (27 September 2019), <<https://nationalpost.com/news/naturopathy-is-poised-to-disrupt-health-care-status-quo-proponents-of-controversial-practice-say>> (Accessed August 20, 2021); Sharon Kirkey, “Criticism for Ontario city’s decision to grant \$45K toward naturopathic clinic”, *National Post* (6 November 2019), <<https://nationalpost.com/news/confused-ontario-city-spends-45k-toward-naturopathic-clinic-because-it-has-a-shortage-of-doctors/wcm/06ea4596-5d4b-4464-b202-d6cbb1df799a/>> (Accessed August 20, 2021); Mark Fontes and Shawn O’Reilly, “Naturopathic medicine plays credible complementary role in improving Canadians’ health,” *Canadian Association of Naturopathic Doctors*, September 30, 2019, <<https://www.cand.ca/wp-content/uploads/2019/10/CANDNPSept302019-4.pdf>> (Accessed August 20, 2021); Mark Fontes, “Statement by chair of the Canadian Association of Naturopathic Doctors Dr. Mark Fontes, ND,” *Canadian Association of Naturopathic Doctors*, November 6, 2019, <<https://www.cand.ca/wp-content/uploads/2019/11/CAND-statementNov6.pdf>> (Accessed August 20, 2021); Nick Seebruch, “Councillor points to missing facts in National Post naturopath story”, *Cornwall Seaway News* (6 November 2019), <<https://www.cornwallseawaynews.com/2019/11/06/councillor-points-to-missing-facts-in-national-post-naturopath-story/>> (Accessed August 20, 2021).
 21. *Supra*, note 5, Meyer, “Naturopaths in Ontario”, 9.
 22. *Supra*, note 6, Ng, “The regulation of complementary and alternative medicine”; Snow, “The social construction of naturopathic medicine”, *supra*, note 6.
 23. Ijaz, *et al.*, “Supportive but worried”, *supra*, note 5; Ng, “The regulation of complementary and alternative medicine”, *supra*, note 6; Daniel Hollenberg, *et al.*, “Addressing provider shortage in underserved areas: The role of traditional, complementary and alternative (TCAM) providers in Canadian rural healthcare” (2013) 5:1 *European Journal of Integrative Medicine* 15-26.
 24. Timothy Caulfield, Alessandro R. Marcon, and Blake Murdoch, “Injecting Doubt: Responding to the Naturopathic Anti-Vaccination Rhetoric” (2017) 4:2 *Journal of Law and the Biosciences* 229-249; Caulfield, Timothy and Christen Rachul, “Supported by Science? What Canadian Naturopaths Advertise to the Public” (2011) 7:14 *Allergy, Asthma and Clinical Immunology* 1-4.
 25. J.M. Dunn, *et al.*, “Characteristics of global naturopathic education, regulation, and practice frameworks: results from an international survey” (2021) 21:67 *BMC Complementary Medicine and Therapies* 1-19.
 26. Mike Saks, “Book Review of *Nature’s Path: A History of Naturopathic Healing in America* by Susan E. Cayleff, (2017) 30:3 *Social History of Medicine* 711.
 27. *Supra*, note 5, Boon, “Canadian naturopathic practitioners”; Ijaz, “Supportive but worried”, *supra*, note 5.
 28. Joshua Z. Goldenberg, *et al.*, “Shifting attitudes towards research and evidence-based medicine within the naturopathic medical community: the power of people, money and acceptance” (2017) 4 *Advances in Integrative Medicine* 49-55.
 29. Alan C. Logan, *et al.*, “North American Naturopathic Medicine in the 21st Century: Time for a Seventh Guiding Principle—*Scientia Critica*” (2018) 14:5 *Explore* 367-372.
 30. Logan, *et al.*, “Time for a Seventh Guiding Principle”, 370, *ibid.*; Nelson, “The bell tolls for homeopathy”, *supra*, note 9.