QMR

QUEEN'S MEDICAL REVIEW

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Letter from the Editors

Dear Readers,

What's your position on complementary and alternative medicines (CAM)? Do you turn up your nose at those who roam the aisles of health food stores in search of natural remedies? Or do you maintain faith in CAM, willing to re-try the oregano oil drops and broths of your childhood whenever you feel a cold coming on? This issue of QMR explores the ins and outs of CAM: its ethics, its incorporation into medical practice, and its place in the Canadian health care spectrum.

Thomas Krahn (2017) kicks things off by reminding us that while medical practice is full of uncertainty, we can take inspiration from CAM practitioners. Mark Broussenko (2016) further explores the role of CAM in day-to-day practice in his op-ed, while Allison Rosen (2016) brings us faculty perspectives on the topic. Balancing out the debate by bringing us some input from CAM practitioners are Steven Tong (2017) and Branden Deschambault (2016).

This issue tries to clarify some of the often-confused terms in CAM; Laura Bosco (2017) looks at the difference between NDs and MDs as well as dietitians compared to nutritionists, while Louisa Ho (2017) looks at the terms naturopathy vs homeopathy. In addition, Jane Kobylianskii explores traditional aboriginal healing in Canada. To round out your knowledge, we have Thomas Krahn's (2017) quick facts on CAM.

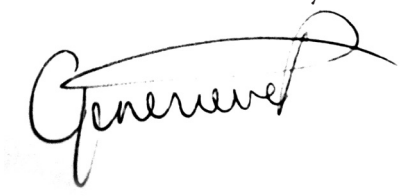
Aera Jung (2017) investigates the QMED sentiment on CAM: she reveals the results of a survey posed to Queen's Medicine students about their opinions on CAM. How do you compare?

Queen's med students have some amazing creativity, and this issue is no exception: we also feature a creative piece by Sarah Luckett-Gatopoulos (2014) that explores the controversy surrounding vaccinations, and a photo story by Adam Mosa (2018).

Last but not least, we would like to extend our sincerest gratitude to our fantastic team of writers and editors for their incredible contributions to this issue, as well as to our faculty advisor Dr. Jacalyn Duffin for her continued support. Without all of you, the QMR would not be possible. Thank you, and we hope you enjoy the QMR: Complementary and Alternative Medicines issue.

Cheers,

Genevieve Rochon-Terry



Louisa Ho

Managing Uncertainty

THOMAS KRAHN, CLASS OF 2017

What is the appropriate answer when a patient asks their physician if a treatment will cure them? Of course, the answer depends on the circumstance: who is the patient, what is the disease, and what is the proposed intervention? But in answering this question, we have to acknowledge one fundamental axiom: we cannot predict the future.

"...we have to acknowledge one fundamental axiom: we cannot predict the future..."

As the professional creed of physicians involves a fiduciary duty to patients, it is expected that physicians act with complete honesty in the best interests of their patients. However, this becomes complicated when what is best is unclear. As the role of the physician in the therapeutic relationship has changed, so has the role of physician as educator. Physicians must now incorporate into their practice evidence interpretation and the delivery of this interpretation to patients, in order to reach the best decision for the patient.

Evidence-based medicine and the rise of patient autonomy have certainly made this decision-making process easier in many ways for the physician. When patients can be grouped into populations with specific risk factors, and treatment effects are known and quantified, weighing the options becomes a question of probabilities. Presenting this information to the patient for the ultimate decision in some ways relieves physicians of the burden of the decision.

"...despite the omnipresence of evidence, every physician deals with uncertainty..."

Yet despite the omnipresence of evidence, every physician deals with uncertainty. By a broad definition, not all medical interventions and practices are based on evidence, and outcomes are never 100%. Studies based on populations cannot predict the particular outcomes of individuals, and wide variations in treatment effect or side effects can occur, resulting in markedly different outcomes.

It is useful, in some ways, to consider approaches to patient care offered by practitioners of Complementary and Alternative Medicine (CAM). While it is difficult to encompass the variety of perspectives included in the umbrella term of 'complementary and alternative medicine' a few general principles can be said to be universally applicable. Fundamentally, there is the claim of practitioners that CAM modalities treat the patient with a 'holistic' approach to health, attending to mental, psychological, spiritual, and social aspects of overall patient well-being. Additionally, CAM therapies often draw on practices preceding the application of the scientific method to medical interventions, considered the prerequisite for acceptance within the conventional medical paradigm of evidence-based medicine. As CAM therapies and health care exist outside of conventional health care systems and the pharmaceutical industrial complex, research funds and studies are scarcer; application of CAM interventions are therefore based more on tradition and the experiences of the practitioners who have been trained in their application.

"Fundamentally, there is the claim of practitioners that CAM modalities treat the patient with a 'holistic' approach to health, attending to mental, psychological, spiritual, and social aspects of overall patient well-being..."

Interestingly, studies in Switzerland and Germany report greater patient satisfaction when CAM is included in primary care. These findings are despite the levels of uncertainty that exist around the field of CAM as a whole, especially when viewed through the lens of evidence-based medicine. These findings speak volumes about the effectiveness of the philosophy of 'treating the whole patient.' The treatment of some chronic diseases, such as bowel disorders or back pain could certainly benefit from an increased focus on the all aspects of the patient's well-being, as the causes of these diseases can be idiopathic and their effects debilitating. As well, this underlines the importance of engaging in the subjective and emotional aspects of the healing process, something often ignored when focusing only on objective results.

A deeper understanding of patient values could help bridge this gap, and provide a better experience for patients as a whole. People have multiple worldviews, and it is not often that their life decisions are made solely on the basis of available evidence. Though the scientific method has yield-

"...the marked benefits of a therapy for a subset of a population may be lost in studies of the larger population..."

ed enormous advancements in the field of medicine over the last century, physicians need to acknowledge the multiple world perspectives that patients may have, and the importance of these views to patient well-being. As well, a healthy understanding of the limitations of the scientific method, especially when applied to clinical research, should also be emphasized here. Individuals are heterogeneous: the marked benefits of a therapy for a subset of a population may be lost in studies of the larger population.

"The art of medicine comes from the application of evidence and clinical judgment to best suit the values of the individual patient and the circumstances at hand..."

Thus, the experiences of CAM prove instructive in multiple ways. If we take the efficacy of CAM to be less than that of conventional medicine overall, the subjective experience certainly matters to patient satisfaction. Inspiring confidence in patients and giving them reason to believe that you have faith in your practices can only contribute to better outcomes. The physician should commit to be being a part of the subjective patient experience, and inspire confidence in the decisions the patient ultimately makes. The art of medicine comes from the application of evidence and clinical judgment to best suit the values of the individual patient and the circumstances at hand.

A critical look at the alternatives means a critical look at our own methods. If we accept the shortcomings of conventional medicine, and offer comfort, confidence, and faith in our patients, we can better manage uncertainty in our future patients.

Key points in managing uncertainty:

1. Treat the patient as a individual
2. Accept that we will never be able to fully predict the outcome
3. Despite uncertainty, offer confidence and inspiration to patients
4. Be open to alternatives: what works for the patient may not conform to the available standard

Op-Ed: Ethical Conversation and CAM

MARK BROUSSENKO, CLASS OF 2016

The issue of ethics within complimentary and alternative medicine (CAM) is one that many medical professionals address with great trepidation, or not at all. There is a hesitation, pervasive throughout the medical community, towards dictating a patient's beliefs regarding alternative therapies. We worry about paternalistic attitudes and of undermining our rapport with patients who may balk at a heavy-handed dismissal of a trusted remedy. A specter of racism, cultural insensitivity and plain rudeness hangs in the background of even the most well-intentioned critique of a traditional remedy, family cure-all or exotic herbal concoction. We want to be prescriptive with our patients – take this over the counter remedy, avoid those other ones, save your money, vaccinate your kids, herbal remedies are mostly placebo – yet we tend not to. Instead, we retaliate against ideologies grounded in fear, ignorance and misinformation by doubling down on our appeals to epidemiology and science. There are appeals to risk reduction. Herd immunity. Quibbles and qualifications about 'average', 'typical', 'most people, most of the time'. Nods to the placebo, nocebo and gazebo effects. In our fear to offend, our reticence to judge and paternalize, we instead deflect with science, try to shift the issue away from the individual and towards the population. The issue is not with your decision per se, but with what it would mean if everyone else did as you do.

Apologists for this approach often reply with a sad shake of the head, a plaintive supination of the hands and a sad, knowing appeal to 'patient autonomy'. After all, who are we to tell others how to live their lives? However, this line of reasoning is flawed and, frankly, offensive.

We are not so naïve as to forget that autonomy needs to be balanced against the other principles, those of justice, benevolence and non-maleficence. Aspects of CAM have a clear and demonstrably be shown not to adhere to these principles. A parent's refusal to vaccinate his or her child harms not only the child (a grievous injustice in its own right) but also those other children who are unable to be vaccinated for one reason or another and rely on the protective effect of mass vaccinations to eliminate the potential reservoir of deadly and untreatable disease. Hardly just or benevolent. A patient who makes a decision based on misinformation, false advertising or emotional appeal is hardly informed, and is in no way helped by our turning a blind-eye to these issues for risk of appearing insensitive. Where is the non-maleficence in this? The case of a child who dies because a common infection is treated with home remedies rather than antibiotics, is not a morally ambiguous situation. It is a tragedy, and we would be remiss for even considering not intervening.

"What we are discussing is our abject cowardice with respect to the conversation that some elements of CAM practices are not acceptable..."

The above examples are, of course, laced with too much nuance and subtext to explore here. The conversation is not about the finer points of biomedical ethics with respect to confronting opposing beliefs. What we are discussing is our abject cowardice with respect to the conversation that some elements of CAM practices are not acceptable. As practitioners, the onus is on each of us to not only respond appropriately when a situation like the above arises, but also to actively engage with CAM wherever possible. The message from the medical community should be clear and unequivocal. Certain behaviors are unacceptable, and we are responsible for addressing them as such. These conversations will be difficult and unpleasant. Some might even go poorly but we, as medical professionals, are perhaps uniquely well prepared to address such uncomfortable situations. Difficult conversations is a course. Breaking bad news is a way of life. Other articles in this issue of the QMR address the content of the message. This one intends to persuade you that the conversation about dangerous CAM practices should not, and cannot be optional. If telling a parent that his or her child has died is an easier conversation than one about the need for antibiotic therapy, we have a problem. Too often, that problem is that we end up having the easier conversation, rather than the difficult one. And that, dear reader, is a problem that we cannot afford to have.

ND vs. MD Curriculums: Where's the difference?

LAURA BOSCO, CLASS OF 2017

The growing popularity of complementary and alternative medicine has increased the demand for naturopathic doctors (ND) and led to the frequent comparison between NDs and medical doctors (MD) regarding their knowledge base, clinical application, and role in patient care. There are two accredited Naturopathic Medicine schools in Canada: the Canadian College of Naturopathic Medicine (CCNM) in Toronto, ON[1], and the Boucher Institute of Naturopathic Medicine (BINM) in Vancouver, B.C[2]. The CCNM accepts approximately 140-160 in each class, whereas BINM accepts a maximum of 35 students[1,2]. This article aims to compare and contrast the curriculum of their 4-year undergraduate educational programs.

Both programs emphasize a strong science background in their training. The first year courses common to both ND and MD degrees include: anatomy, embryology, immunology, biochemistry, physiology, ethics, and research appraisal[1,3]. In the ND program, there are additional courses that reflect the "holistic, nontoxic approaches" to disease prevention and wellness: Asian medicine, botanical medicine, homeopathic medicine, clinical nutrition, naturopathic history, naturopathic medicine, and massage and hydrotherapy[3].

The second year ND curriculum expands the knowledge base acquired in first year, and introduces clinical reasoning and diagnosis, similar to the MD program. While the typical MD second year consists of systems-based courses, covering pathophysiology, diagnosis and treatment relevant to each body system, ND programs typically focus on how a symptom affects one's entire well-being3. Courses such as microbiology, naturopathic manipulation, clinical medicine, physical and clinical diagnosis practicums, and pharmacology are introduced; homeopathic medicine, botanical medicine, Asian medicine, and clinical nutrition are continued to expand the breadth and depth of knowledge and clinical application[3].

The third and fourth years of the MD undergraduate program share some similarities in structure, but differ in responsibilities from those of the ND program. MD clerkship involves clinical rotations in a variety of specialties and serves as an opportunity to explore and gain experience in different fields of medicine before deciding on a specialty. Although clerks play an important role in patient care as part of the medical team, they are not directly responsible for the patient. In third year of an ND program, there is an increased proportion of clinical exposure and related courses: pediatrics, primary care, emergency medicine, maternal and newborn care, physical medicine, radiology, and men and women's health, in addition to Asian medicine, naturopathic manipulation, botanical medicine and clinic hours[3]. In fourth year of an ND program, the majority of the term is composed of clinic hours, with courses in practice management, ethics, and integrated therapeutics as well[3]. The clinical training in the third and fourth years of the ND program are focused on preparing students to independently diagnose and treat their own patients upon graduation[3], whereas medical student clerks are being prepared for residency.

Upon graduation, medical students are required to complete a residency program for further training, which is mandated and regulated by medical schools. Naturopathic residency programs are less common as they are not required nor funded by the government. Instead, many naturopathic graduates choose to shadow or practice with a more experienced naturopathic doctor to gain more clinical experience. The ND curriculum is designed to train its graduates to become primary care providers, and thus introduces many specialty subjects without covering them in depth. ND students are taught to recognize symptoms of diseases that may fall outside of their scope of practice, such as cancer, in order to provide the appropriate referral to an MD. Overall, both MDs and NDs aim to prevent disease and improve the health and well-being of their patients. Where MDs seek conventional modern medicine, NDs seek holistic, traditional approaches to treatment.

The objectives of the ND and MD curriculums[4,5] compare as follows:*

	Medical Doctor	*Naturopathic Doctor*
History	• Elicit and interpret pertinent events from the patient, family or other sources.	• Manage the underlying spiritual, social, mental and physical causes of disease.
Physical Examination	• Perform a physical examination appropriate to the age of the patient and nature of the clinical problem(s) presented.	No pertinent objectives listed.
Investigations	• Select and interpret appropriate laboratory and other diagnostic procedures that confirm the diagnosis; exclude other important diagnoses or determine the degree of dysfunction. • Perform common procedures using the appropriate instruments and materials	• Integrate biomedical with clinical science knowledge in the assessment, diagnosis and management of patients.
Clinical Judgement and Decision Making	• Interpret pertinent data in order to: 1. List and prioritize a differential diagnosis for common clinical problems 2. Diagnose specific common diseases 3. Diagnose more rare, but life threatening diseases • Differentiate among acute emergency situations, acute exacerbations of chronic illnesses and serious but non-emergency situations. • List the indications for specialized care and/or consultation.	• Utilize naturopathic therapeutics in the individualized care of patients including but not limited to: o Asian medicine o Botanical medicine o Clinical nutrition o Health psychology/counseling o Homeopathic medicine o Lifestyle modification o Natural cure o Pharmaceuticals
Management Skills	• State the pharmacologic effects, the clinical application including indications, contraindications, major side effects and interactions of commonly used drugs.	• Collaborate effectively and work in partnership with other health care practitioners. • Demonstrate commitment to the advancement of the naturopathic profession.
Critical Appraisal	• Evaluate scientific literature in order to assess the benefits and risks of current and proposed methods of investigation, treatment and prevention of illness.	• Appraise and apply research in treating patients.
Law and Ethics	• Discuss the principles of law, biomedical ethics and other social aspects related to common practice situations.	• Practice in a manner that exemplifies professionalism, strong ethics and a commitment to the principles of naturopathic medicine.
Health Promotion and Maintenance	• Formulate preventive measures into their management strategies; ommunicate with the patient, the patient's family with regard to risk factors and their modification where appropriate. • Describe programs for the promotion of health including screening for, and the prevention of, illness.	• Manage chronic disease. • Identify the need for urgent and emergent health care and direct appropriate resolution.

**Please note that this list of objectives is adapted from the Canadian College of Naturopathic Medicine (CCNM) and Medical College of Canada (MCC) websites to highlight the similarities and differences between the professions, and is not comprehensive[4,5].*

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Natural Medicine: *Terminology*

LOUISA HO, CLASS OF 2017

The term **natural medicine** encompasses a number of modalities, including mind-body therapies (e.g. art therapy, biofeedback), biologically-based therapies (e.g. herbal products), manipulative methods (e.g. reflexology, osteopathy) and energy therapies (e.g. qi gong). As more and more patients are becoming interested in exploring alternative medicines, it is important for health care professionals to familiarize themselves with the terminology, which can be confusing at times. In particular, naturopathy and homeopathy are two often mixed up terms; while the two modalities are complimentary, they are not the same.

A **naturopathic doctor (ND)** is a general practitioner who has undergone formal training in school. On the other hand, **naturopaths** are self-taught, or were apprentice to another naturopath. Other groups, such as chiropractors, massage therapists, and nutritionists may also include some naturopathic methods in their practice.

It should be noted that a **homeopath** is a specific kind of naturopath with subspecialty training in in homeopathy within naturopathic medicine. Homeopathic remedies are said to work by stimulating the intrinsic curative powers of the body. The term was coined by German doctor Samuel Hahnemann - "Any substance which, when given in a strong dose, produces specific symptoms in a healthy person, is likely, if given in a homeopathic [i.e., infinitely small] dose, to cause those same symptoms to disappear in a sick person."

The high dilutions characteristically used are often considered to be the most controversial and implausible aspect of homeopathy. Comparative studies have demonstrated that homeopathic effects are comparable to placebo effects[1]; in other words, homeopathy simply does not work. In fact, currently available scientific evidence does not support that naturopathic medicine in general is an effective treatment modality for most health problems. Although there is increased interest in integrating alternate method modalities for treatment of chronic conditions such as cancer. most claims in the literature are based on individual case reports, medical records, and summaries of practitioners' clinical experiences[2,3].

A brief primer on key differientiating features of naturopathy and homeopathy:

	Naturopathic Medicine	***Homeopathic Medicine***
Approach	Primary care using natural medicine; treatments support and stimulate a person's innate healing capacity.	Trigger body's natural system of healing using diluted substances.
Principle	*Vis Medicatrix Naturae* ("Healing power of nature")	*Similia similibus curentur* ("Like cures like")
Treatment Modalities	Clinical Nutrition, Hydrotherapy, Herbal Medicine, Traditional Chinese Medicine, Physical Medicine, Homeopathy	Tablets prepared by specialist pharmacies using a process of dilution and succession (a specific form of vigorous shaking).
Regulation	Regulated Health Professions Act	None
College	Canadian College of Naturopathic Medicine (CCNM)	Canadian College of Homeopathic Medicine (CCHM)
Training	4 years of training at an accredited naturopathic college	Post-graduate specialty
Accreditation	Naturopathic Physicians Licensing Examinations (NPLEX)	Accreditation Commission for Homeopathic Education in North America (ACHENA)
Designation	Doctor of Naturopathic Medicine (ND)	

Traditional Aboriginal Healing in Canada: *An Overview*

JANE KOBYLIANSKII, CLASS OF 2017

Those unfamiliar with the practice of traditional Aboriginal healing will often envision a ceremony of spirits and herbs taking place in Canada's past, on an Aboriginal reserve distinct from the sphere of Western medicine. In reality, traditional healing has a sanctioned role within complimentary and alternative medicine, and holds an important position within the contemporary context of health and wellness. To gain an understanding of traditional Aboriginal healing and what it can offer, one must first explore its history and progression towards the present.

Traditional healing practices – past and present

"There are generally three types of Aboriginal traditional healers: herbalists, medicine men, and shamans..."

There are generally three types of Aboriginal traditional healers: herbalists, medicine men, and shamans. These healers differ mostly in the extent to which spirituality is involved in their treatment. Herbalists use various plant-based and herbal medications, such as sweetgrass and sage, to treat illness (and are therefore the most separated from any spiritualism).[1] Medicine men are sanctioned to heal those that seek their service by supernatural powers and they follow supernatural instructions in conducting healing rituals and ceremonies.[1] A shaman falls into a deep trance or ecstatic state and makes contact with spirits during healing sessions. These healers were historically observed to perform tricks, such as swallowing a bone and subsequently retrieving it from the part of the patient's body affected by an illness.[1] These practices clearly identify shamans as the most spiritually-guided Aboriginal healers.

Prior to the landing of Europeans in Canada, traditional healing was common and openly practiced among Aboriginal culture.[2] Moreover, consistent with the significant diversity of the Aboriginal cultures with respect to geographical areas, languages, lifestyles, and traditions, the popular forms of healing varied significantly between groups. Healers living in certain cultures, such as the Cree communities, demonstrated a greater understanding and propensity for use of plants and herbs, while others relied more on supernatural acts and beliefs during their healing services.[1]

After colonial contact, discouragement and formal legislation resulted in the prohibition of many Aboriginal traditions, including several healing practices. In 1880, the Indian Act was amended to include the first of many regulations that prohibited engaging in or facilitating certain healing approaches, especially those involving shamanistic acts and dances.[2] Fear of prosecution led to the gradual loss of these practices and the knowledge required to perform them; the healing acts that endured were largely practiced in secret.[2]

It was only in the early 1950s that the Indian Act was amended to remove bans on traditional Aboriginal rituals.[2] In the 1980s, Aboriginal medicine and healing methods began to re-emerge, reflecting a need for Aboriginal individuals to reclaim their lost culture.[1] Many writers on Aboriginal traditional healing emphasize that this reclamation of spirituality and culture through healing practices was necessitated by the consequences of the suffering inflicted by residential schools and other aspects of colonialism.[2] Several Aboriginal communities plagued by alcoholism and addiction, such as Alkali Lake in British Columbia, revitalized certain practices, like the sweat lodge and healing circles, in order to successfully address these issues by reintroducing culture and spirituality into the lives of those affected.[1]

"Presently, traditional Aboriginal healing services are utilized by both Aboriginal and non-Aboriginal people across Canada, especially in urban settings..."

Presently, traditional Aboriginal healing services are utilized by both Aboriginal and non-Aboriginal people across Canada, especially in urban settings. Data collected by the 2006 Aboriginal Peoples Survey indicates that about 35 per cent of Metis people living in urban areas have access to traditional medicines.[3] Similarly, both Aboriginal and

non-Aboriginal patients seek out various types of customary healing services. Traditional Aboriginal treatment centers across Canada now offer popular services like healing circles, smudging, and certain spiritual ceremonies.[4-6] Healing circles and smudging may be more familiar than the latter.

"Presently, traditional Aboriginal healing services are utilized by both Aboriginal and non-Aboriginal people across Canada, especially in urban settings..."

Healing circles are group therapeutic sessions, occasionally conducted by shamans who seek to address physical, social, and spiritual concerns[7] Smudging is a form of ritual cleansing that involves burning a medicine plant and directing the smoke to areas of the body that require healing.[8] Spiritual ceremonies often include sweat lodges, which are cleansing rituals held by medicine men in a ceremonial sauna,[7] and shaking tent ceremonies, which involve the construction of a lodge that allows the entrance of spirits, encouraged by the shaman leading the ceremony.[9] One of the most familiar and widely used tools in the treatment centers that offer traditional Aboriginal healing is the medicine wheel, a symbol of Aboriginal healing that includes the fours directions – North, East, South, West – and represents the four aspects of health and vitality – mental, emotional, physical, and spiritual.[10] This concept is used as a tool to emphasize the need for balance between these valued dimensions of Aboriginal living, as well as the holistic approach used in traditional healing.[10]

Presently, Health Canada recognizes traditional Aboriginal healing within the sphere of complimentary and alternative medicine.[11] These practices are no longer discouraged and prohibited as they were during colonialism. Indeed, the 1994 Aboriginal Health and Wellness Strategy for Ontario states "traditional Aboriginal approaches to wellness, including the use of traditional resources, traditional healers, medicine people, mid-wives and elders, are recognized, respected and protected from government regulation. They enhance and complement healing, as well as programs and services throughout the health system."[12] The Regulated Health Professionals Act in Ontario (1991) further supports the special place of Aboriginal traditional healing within conventional health care. This Act provides an exemption to the clause that no individual except a regulated health professional may provide medical services, thus allowing Aboriginal healers and midwives to provide traditional healing or midwifery services to Aboriginal patients.[13]

The Canadian government and medical community especially recognize the validity and effectiveness of Aboriginal traditional healing within the realm of mental health. In 1983, a special report from the department of National Health and Welfare Canada stated: "We have come to appreciate very much the relevance and the utility of traditional approaches, particularly to mental health problems – approaches which address the suicide rate, approaches which address addiction problems. We believe that in areas such as those, the application of traditional medicine and native culture perhaps can be more successful than anything we could offer in terms of contemporary psychiatric approaches."[14]

Concurrent use of traditional Aboriginal and biomedical health services

"It has gradually become commonplace to see traditional healing rituals and practices performed in hospitals, clinics, or other institutions..."

It has gradually become commonplace to see traditional healing rituals and practices performed in hospitals, clinics, or other institutions.[1] More recently, specialized Aboriginal health centers providing traditional healing services have become established, such as the Kingston local Katarokwi Native Friendship Centre, founded in 1992, which offers a traditional healing and wellness program.[5] The widespread availability of traditional Aboriginal healing modalities, even in urban environments, creates a setting of medical pluralism.[1] Traditional healing services offered in this context are often used concurrently with contemporary biomedical services by many Aboriginal and non-Aboriginal patients. Waldram suggests several explanations for patients' decision to utilize both. It is possible that Aboriginal patients use the biomedical system for alleviation of symptoms of their illness, but then attempt to address its etiology through a holistic Aboriginal approach. Alternatively, patients may in desperation seek any and all possible treatment, or turn to one system when the other has failed them.[1]

Ultimately, in order to allow for these practices to occur within the context of safe patient care, both the contemporary biomedical health care provider and the traditional healer must be aware of the medical pluralism taking place. Due to the paucity of evidence for the efficacy of traditional Aboriginal healing in the treatment of physical illness, physicians may be tempted to dismiss use of these services as ludicrous, creating a situation that threatens the safety of the

patient.[1] On the other hand, some traditional healers may require that patients discontinue any prescription medications prior to taking part in a ceremony or ritual.[1] In 2001, Jane Maiangowi, an elder in the Wikwemikong community in Ontario, died during a three-day spiritual ceremony led by a visiting shaman who instructed her to discontinue her oral hypoglycemic diabetes medication prior to engaging in the service.[15] Moreover, certain herbal medicines may negatively interact with conventional medications, resulting in potential harm for the patient if not recognized.[1] Finally, due to the recent increase in popularity of alternative medicine among the general population, there have been New Age adaptations of traditional Aboriginal healing practices that have resulted in harm to those seeking their services.[1] For example, in 2009, three individuals died during a sweat lodge conducted improperly in Sedona, Arizona as part of a commercial retreat.[16] Due to the unregulated nature of Aboriginal traditional healing, ensuring that patients are referred to community-validated healers is crucial for avoiding potentially dangerous New Age services and subsequent complications.[1] The use of traditional healing services poses certain issues that may compromise patient wellness within the contemporary context.

"Due to the unregulated nature of Aboriginal traditional healing, ensuring that patients are referred to community-validated healers is crucial for avoiding potentially dangerous New Age services and subsequent complications..."

Despite such concerns, the philosophy that underlies many traditional Aboriginal healing practices has much to offer to practitioners of contemporary biomedical medicine. As demonstrated by the medicine wheel and the infusion of emotion and spirit into each healing ceremony, traditional Aboriginal healers use the notion of holistic healing and refuse to treat the body and mind separately. This philosophy speaks to the whole patient approach, commonly sought within contemporary medicine. Further, although physicians practicing Western medicine must be skeptical of treatments not validated by biomedical research, it is important to not become cynical of other therapies and to remain open to recognizing their benefits. Especially when working with an Aboriginal patient population within the psychosocial or mental health context, contemporary medicine could truly stand to benefit by encouraging physicians to refer to a community-validated Aboriginal traditional healer or healing center where available.[1]

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Confusing Terminology: Dietician vs. Nutritionist

LAURA BOSCO, CLASS OF 2017

The terms "dietitian" and "nutritionist" are often, and incorrectly, used interchangeably. It is, however, important for health care professionals to understand the difference between these terms when referring patients for nutritional consultations.

Dietician

"Dietitian" is a protected title, indicated by R.D., P.Dt., or D.Pt after one's name. Becoming a dietitian requires a bachelor's degree in food and nutrition from a university program accredited by Dieticians of Canada[1]. These programs focus on basic sciences, social sciences, and communications, as well as profession-related courses such as food science, disease-specific courses, community nutrition, and food service management[2]. Following the undergraduate program, one must apply for a post-degree internship or a master's practicum, both of which are highly competitive. The internships are sponsored by hospitals or other care facilities, and typically last 35–40 weeks[1]. The master's practicum programs are run through the accredited university program, and can be thesis or non-thesis based. The practicum experience is incorporated into the curriculum design, where the university organizes the placements[1]. In addition, there are programs that integrate the undergraduate program and the internship, where some or all of the admitted students are provided placements.

After training is completed, dieticians must register with Provincial Regulatory Bodies and are the only professionals who can use the protected titles "Registered Dietician", "Professional Dietitian", and "Dietitian"[1]. Registrants must pass the national Canadian Dietetic Registration Examination, administered by the provincial regulatory body[3]. In Ontario, the regulatory body is the College of Dieticians of Ontario[3]. After registration, dietitians are accountable to their provincial body for professional conduct, the quality of their care, and ethical practice[3].

"The responsibilities of a dietitian include providing advice around diet, food, and nutrition..."

The responsibilities of a dietitian include providing advice around diet, food, and nutrition[2]. Dietitians help people make healthier food choices, and establish healthy eating plans to promote health and prevent chronic illness such as hypertension, cardiovascular disease, and diabetes[2]. They also advise the government on population-wide strategies to change the type of advertising to children and the status of school nutrition guidelines, and to implement policies and guidelines in processed food production and marketing[2].

Nutritionist

In contrast, the term "nutritionist" is not protected by any law or governing body. Anyone may refer to him or herself as a nutritionist, as no formal training or certification is required. Nutritionists may support or promote any eating plans or habits to their clients, and they are not bound by the ethical and professional practices of dietitians.

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The term "nutritionist" has been commonly associated with holistic medicine, where there is less focus on evidence-based diets and eating plans, and a greater focus on natural, alive, and good-quality foods for physical, emotional, and spiritual well-being[4]. There are educational programs in Natural Nutrition and Holistic Nutrition, however these are unregulated and lack governmental accreditation[4]. Nutritionists are often sought after when conventional medicines fail to yield the desired results, or when the patient would prefer to put off conventional medicines until other avenues have been explored[1]. However, dietitians also utilize holistic approaches in treatment as they are trained to take

"Nutritionists are often sought after when conventional medicines fail to yield the desired results, or when the patient would prefer to put off conventional medicines until other avenues have been explored..."

a nutrition-based approach to illness, disease prevention and health promotion. They communicate with the medical team and they are part of government-regulated health services[2].

In conclusion, choosing between a dietitian and nutritionist is a personal choice; however, dietitians' provincial regulation, establishment in the medical community, and evidence-based plans make them the better choice for most nutritional consultations.

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Tell Your Doctor!

ALLISON ROSEN, CLASS OF 2016

Study after study has highlighted just how widespread the use of complementary and alternative medicine (CAM) is among patients. Yet the same studies emphasize that very few patients disclose these practices to physicians[1,2]. This poses an evident problem, since it is critical for physicians to know all substances a patient is ingesting in order to provide good care, as some substances may have adverse interactions.

As medical students, we are told by our families, patients, and professors the importance of compassion and communication. So why do patients feel the need to hide so much from us?

When among colleagues, many medical practitioners scoff at the notion of CAM - rolling their eyes at stories of patients who have tried Reiki or a 'detox diet' before seeking the medical care we know in our hearts and minds to be the right course of action.

Therein lies the problem.

As medical practitioners, we see the dangers of delays in seeking treatment. We see the harms caused by false hope. We see the desperation to do something, anything, to try and help a loved one. Through exposure to these scenarios, we may become angry. But does this response really help our patients? The more important question to ask may be the one of preventing this communication gap in the future. The QMR turned to the Queen's faculty to learn more about the place for CAM in medical education.

Faculty Perspectives – Dr. Reid

Dr. Robert Reid, an Obstetrician at Queen's, lectures students about menopause. In this class he outlines hormone therapies and other treatments to minimize the symptoms of menopause. He emphasizes that apart from hormone therapy, any effect of other methods is at most placebo effect.

Dr. Reid does not believe the topic of CAM has been well addressed in the Queen's curriculum. He expanded on his thoughts about CAM regulation. "My view is that alternative therapies should be held to the same standards of scientific proof that other therapies are held to. Unfortunately, the Canadian government let many of these [alternative therapies] into the system under the designation of 'food products' instead of 'medicines'. The government has made a recent effort to correct this but those products already on the shelves are 'grandfathered,' meaning they don't have to meet any scientific standards. This is why there are counters full of alternative therapies in every drug store." Most medical students are unaware of this regulatory process. If we were better aware of regulatory mechanisms, then we could educate patients that just because something is in the aisle for "colds and flus," it does not mean that the product was tested and shown to be effective for that purpose. But before we can educate patients on selecting the best treatment, we must first have better foundational knowledge about regulatory bodies and procedures.

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"…just because something is in the aisle for "colds and flus," it does not mean that the product was tested and shown to be effective for that purpose…"

"…before we can educate patients on selecting the best treatment, we must first have better foundational knowledge about regulatory bodies and procedures…."

Faculty Perspectives – Dr. Racz

Dr. William Racz delivers a lecture on herbal medicine to medical students each year.

"Medical students as future practitioners need to be aware that a significant portion of the Canadian population are [sic] using herbal medicines and do not disclose this fact to their health care providers," Dr. Racz states, echoing the sentiment of the medical practice as a whole. In his lecture, he hopes to emphasize that just because something is 'natural,' it doesn't mean that the substance is not toxic. "We need to acknowledge that the patient has the right to be involved in the decision as to the nature of their treatment," he points out. Dr. Racz further suggests that medical students discuss the evidence of a particular herbal medicine with patients. This is particularly important since many herbal medications can interact with traditional allopathic medicine.

"Medical students as future practitioners need to be aware that a significant portion of the Canadian population are [sic] using herbal medicines and do not disclose this fact to their health care providers..."

"The medical student should be aware that these products exist, are being used by the general population and use of herbals can have significant impact on the patient's management," Dr. Racz emphasizes.

"Some medical practitioners may elect to use herbals for the treatment of mild forms of certain disease states. This is a professional choice, but as a pharmacologist, I still want to teach evidence-based therapeutics."

Dr. Racz has advice for medical students grappling with this issue. "The future physician should seek and find evidence for the efficacy and toxicity of herbal products and decide whether to use or recommend these products based on a risk/benefit analysis." Dr. Racz points out that this is no different than what we should do for drugs of all categories.

While scientifically sound studies of CAM were hard to find in the past, recent interest has spurred many studies. "These studies and review articles are key to any discussion of the role of these agents in therapeutics," Dr. Racz points out.

It's Time You Had the Talk

It is worrying to think that such a large number of patients believe that not disclosing CAM use is the best choice of action. However, steps can be taken to improve patient trust and to educate patients. While most patients may believe doctors to scorn CAM and judge those who turn to these modalities, a more accurate statement may be that doctors rightfully mistrust unproven treatment modalities, and that this mistrust is in the patient's best interest.

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Medical professionals must be educated on how medications and other treatments are regulated, and must communicate our intentions and biases clearly and openly to patients. Only then can one can hope for a more open patient-physician interaction, and more harmonious and evidence-based decisions regarding treatment options. We just may find that we attract more flies with honey than with homeopathic vinegar.

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Interview with Dr. Leung

STEVEN TONG, CLASS OF 2017

QMR had a chance to sit down with Dr. Lawrence Leung, a faculty member at Queen's with training in Traditional Chinese Medicine. Dr. Leung obtained his M.D. at Cambridge University and subsequently trained in the UK and Hong Kong before practicing in Canada. He's also completed a specialized program for Traditional Chinese Medicine in Guangzhou. Join us for his interesting perspective on CAM in medicine and medical education!

QMR: Why did you choose to study traditional medicine?

Dr. Leung: Like every clinician, you get kind of self-revelation once in a while. After practicing in Hong Kong, I felt very frustrated that there were so many gaps in Western medicine such as in the areas of chronic pain, headache, insomnia, and depression. I felt myself repeating the same thing to patients, "this is the most I can help you, there's no better treatment", so being Chinese I asked myself, "hmmm Chinese medicine has been around for 4-5 thousand years, there must be something there". Before we knew it, both my wife and I signed up for a course and posted to Guangzhou for first Traditional Chinese Medicine hospital.

QMR: Was it difficult to learn traditional medicine after training in western medicine?

Dr. Leung: It's almost like splitting your brain, I see myself able to complete my training because it's like learning a new language. There's a huge dropout rate for physicians with Western training as it's a completely new paradigm. Chinese medicine is about balance and incorporating all the elements of the universe. It's too vague for western medicine.

QMR: How do you fit both in your practice?

Dr. Leung: Complementary and western medicine is similar as Western medicine has realized that it's about systems biology so I look at it this way. If I see a patient I assess them from a western medicine point of view, but [if they are] not responding to western medicine then I withdraw and look at the entire case from the perspective of Chinese medicine. I see them as a new patient and see them from a diagnostic theory from a traditional medicine perspective. It's very fascinating because you look at it from an individual treatment. For example, some patients may not respond well to acupuncture so I give them herbs. It's individualized, its individual therapy.

QMR: How do you deal with people who tell you there's no evidence for Chinese medicine?

Dr. Leung: It's like asking why apples are apples and not an oranges, it's comparing two different things. They are both fruits and similarly both western and traditional medicine want patients to do well. The only weak point of any branch of CAM is the lack of evidence. But when you look at EBM, it's about a very strict or even inflexible route of reaching the peak of the pyramid of evidence. You compare people who are very different. But this is not what alternative is about, it's basic, it's from antiquity that you are unique and not supposed to compare with other people. So if you use EBM to look at traditional medicine, they are bound to fail.

QMR: How do you think CAM fits in terms of medical education?

Dr. Leung: First, I think ground work needs to be laid and you guys need to accept the broadness of medicine. I see medicine like any branch of biological sciences, there shouldn't be one single way to reach the answer. Just like medicine, if a patient is sick, you should be able to entertain more than one way of pathology. Finally, one thing I hope to see before I retire is the importance of wellness. What we want to do is make the patient well; it's not just the physique. Health is both the mind and the body. We have to work on the well-being of the body and mind in parallel. I really want students of the next generation to incorporate this. And then acknowledge that there are some other paradigms that exist and may offer better options to deal with the wellness of the patients. Only through exploring other avenues can we really treatment the wellness of patients.

QMR: How can we improve CAM in medical education?

Dr. Leung: Get more physicians trained in CAM and give them the due respect.

QMR: What would you like to tell all the young medical students about CAM?

Dr. Leung: From antiquity, we are taught about linear causality. But it's isn't how it is, there are many factors that enter the equation. We really need to stop neglecting other aspects of patient wellness and what they need to be well and feel well. They need to be conversant and not completely bias about other avenues of treatment. I'm not saying CAM is better than Western medicine, no, but that this aspect of medicine should be exposed to students. In a survey, one of my students found that 85% of patients would like more communication about CAM. Be conversant.

QMR: Do you think there is a disconnect between what patients want and what doctors know about CAM?

Dr. Leung: Yes, definitely there is a dichotomy. Patients use CAM whether we like it or not and we need to maintain the physician-patient relationship be being informed about CAM. There could be negative interactions and that can be harmful to patient especially if they are scared to speak to their doctors about it. We need to be conversant, be non-judgemental, and open to speak about it.

QMR: You clearly have lived in many different countries and experienced many different cultures, what are the attitudes towards alternative medicine in other countries in comparison to Canada especially in physicians and medical students?

Dr. Leung: I come from Hong Kong so it's very dominated by western medicine but lately I think the tables have turned. Schools are training young traditional medicine students and the stats are turning around. In Europe, it's definitely something people respect. Other countries like Japan or Korean, the government allows people to use traditional medicine under medical insurance. Unfortunately, Canada is one of the countries that lack behind immensely in turns of acceptable and funding CAM.

QMR: Thank you for sitting down with us and sharing insights and perspective!

What's the big deal? Re-defining Naturopathic Doctors' Scope of Practice in Ontario

BRANDEN DESCHAMBAULT, CLASS OF 2016 & DR. CHRISTOPHER KNEE, ND

In late 2013, with both sides firmly claiming adherence to the highest principles of patient centered care, it took more than a glance to distill the motives for the polarized responses to the revised regulations for the Naturopathy Act drafted by the Transitional Council - College of Naturopaths of Ontario (TC-CONO). On one side, the Ontario Association of Naturopathic Doctors[1] (OAND) suggested the need for further broadened scope of practice, while on the other, the Ontario Medical Association[2] (OMA) and College of Physicians and Surgeons of Ontario[3] (CPSO) argued for more restriction.

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From a historical perspective, it is worth considering that naturopathic doctors (NDs) remain regulated under the Drugless Practitioners Act of 1925 in Ontario, which prohibits them from performing surgery, midwifery, and prescribing or administering drugs or anesthetics. However, the profession was left in a legal grey zone in terms of what defines their scope of practice, despite the transition of similarly regulated physiotherapists, chiropractors and massage therapists to the Regulated Health Professions Act (RHPA) framework of 1991. More than a decade later, in 2007, a Health Systems Improvement Act was approved, which included provision for the regulation of NDs under the RHPA, and their governance by a newly created Naturopathy Act 2007 – which remains unproclaimed to this day.

The TC-CONO is a transient body that was initiated to work with the Ministry of Health and Long-Term Care (MOHLTC) and external stakeholders (i.e. OAND, OMA, CPSO). The group is responsible for setting up the framework for the College of Naturopaths of Ontario to function,

"Many NDs believe the regulatory transition in Ontario will leave their profession inappropriately restricted, and cite jurisdictions such as BC, where they can perform minor surgery and utilize ultrasound/xrays for diagnostic purposes..."

which will include four distinct components outlining: Authorized Acts, Regulation, Professional Misconduct, and Quality Assurance.

To become a ND in North America, candidates must complete a baccalaureate degree and be selected for admission to one of the seven accredited schools, of which the Canadian College of Naturopathic Medicine (CCNM) is the only in Ontario. Students receive four years of training in basic sciences, naturopathic medicine, and holistic primary care. Currently, there are only 5 provinces in Canada that recognize ND licensure – including Nova Scotia, Manitoba, Saskatchewan, Alberta and BC. Many NDs believe the regulatory transition in Ontario will leave their profession inappropriately restricted, and cite jurisdictions such as BC, where they can perform minor surgery and utilize ultrasound/xrays for diagnostic purposes4.

In order to best evaluate this controversy from balanced perspective, I engaged Dr. Christopher Knee, who recently completed his ND training at the CCNM and just opened a practice in The Dempster Clinic in Toronto. I'll first try to briefly present some broad stroke criticisms of my own about the OAND perspective, and then provide Dr. Knee the opportunity to refute and offer his own thoughts.

I would like to premise the following statements with the disclaimer that I personally do believe that NDs contribute an important dimension to preventive primary care and co-management of chronic diseases. However, the emerging body of research the OAND cites – claiming that naturopathic care can improve outcomes for hypertension, type 2 diabetes, chronic pain, and anxiety – has important methodological deficiencies that limit their broader applicability.

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In the context of prevention of cardiovascular diseases, the OAND cites research from Seely et al. which compared enhanced usual care by family physician to enhanced usual care with the addition of naturopathic care (including diet, lifestyle, and natural health product recommendations) in a population of randomly assigned Canadian Postal Workers at elevated baseline risk. The primary outcomes were assessed using the Framingham Risk Score and prevalence of Metabolic Syndrome over one year. At 52 weeks, the naturopathic group (n=124) had significantly better Framingham Risk Scores and a lower adjusted frequency of Metabolic Syndrome than the control group (n=122)[5]. However, the authors did not report on the relative proportions of each group that were receiving medication for hypertension, hyperlipidemia, or diabetes at baseline. Conveniently, the same group went on to publish a cost-effectiveness analysis, using a subset of the same population, which revealed that the naturopathic group had a significantly greater number of individuals on anti-hypertensives, as well as medications for diabetes and hyperlipidemia[6]. In the later paper, the authors rationalized this difference as a product of multiple comparisons and failed to consider it as a confounder. Flawed studies such as this do little to further the case for co-management between MDs and NDs.

Dr. Knee -

"The study you mentioned was pragmatic in nature and designed as such. Demonstrated benefit of naturopathic care was modest, yet significant. This is what I would consider a 'breakthrough' study that will hopefully lead to larger, controlled trials with specific endpoints. While not all specific aspects of the ND scope of practice can be supported by modern clinical trials, there is a demand by the profession to allocate adequate resources towards building the evidence base for the profession, through increased research efforts and community partnerships. Additionally, there is a strong 'historical use' component of the profession which is supported by Health Canada and the MOHLTC, and I am under the impression that much of the supportive evidence provided relates to the proven track record of safety in areas where this expanded scope of practice has already been in place (such as in BC or select U.S. states), and through decades of empirical use. Further, it is my belief that there is proven demand for additional care in a wide variety of conditions, where relevant aspects of dietary and lifestyle counseling, and many other naturopathic services, are currently not being provided. Certainly, it would be ideal if there is opportunity for co-management with an MD, as this allows for co-education surrounding treatment approach and case understanding, improved patient safety and care, and promotes efficient use of health care resources. A perfect example of this collaboration is evidenced by the recent success of the Brampton Hospital Naturopathic Teaching Clinic, the first Canadian outpatient naturopathic clinic to exist within a hospital setting."

"...it would be ideal if there is opportunity for co-management with an MD, as this allows for co-education surrounding treatment approach and case understanding, improved patient safety and care, and promotes efficient use of health care resources..."

Furthermore, following the applauded launch of Choosing Wisely Canada[7], and the heightened scrutiny surrounding physicians ordering diagnostic testing, there are well intentioned concerns about ND access to these publically funded services. For instance, even amongst primary care physicians there is considerable uncertainty surrounding use of Prostate Specific Antigen (PSA) testing for prostate cancer screening, due to the inherent issues with sensitivity and specificity, and specifically, whom to screen and when referral to a urologist is appropriate[8]. Thus, if NDs were permitted to order PSA testing, without experience in identifying high risk patients, discussing relative merits and uncertainties associated with screening, or the referral and treatment process, this can pose as a recipe for inappropriate or redundant testing with the potential to cause considerable unnecessary distress for patients.

"...following the applauded launch of Choosing Wisely Canada[7], and the heightened scrutiny surrounding physicians ordering diagnostic testing, there are well intentioned concerns about ND access to these publically funded services..."

"...NDs would and should be responsible for making evidence-based clinical decisions surrounding all aspects of care, including history and intake, physical examinations, ordering of diagnostic tests, and in developing appropriate treatment plans..."

Dr. Knee -

"In my opinion, NDs would and should be responsible for making evidence-based clinical decisions surrounding all aspects of care, including history and intake, physical examinations, ordering of diagnostic tests, and in developing appropriate treatment plans. Understanding the evidence for and against any diagnostic test, including sensitivity and specificity, and patient education regarding the choice to undergo diagnostic testing, is an inherent responsibility of NDs. I do not solely rely on a PSA reading as a means for screening prostate cancer; instead, I combine this information with relevant clinical findings, such as the patients personal health history, family risk factors, dietary and lifestyle factors related to cancer risk, and physical examination findings such as the digital rectal exam. Having access to a relatively inexpensive test such as the PSA, could allow me to continue to provide care while promoting chronic disease prevention – certainly, if in my clinical findings and judgment the patient began to elicit signs of prostate cancer, I could refer them for TRUS or to an MD or oncologist for assessment. This promotes efficient use of health care resources (financially, and in MD accessibility) while allowing for additional and frequent patient follow-up and monitoring. It should also be noted that the financial cost associated with these tests would not be relevant as it is expected patients will continue to pay out-of-pocket under the new regulations."

I feel honored and proud to be able to engage my friend and professional colleague in this productive discussion. Medical students should recognize the value of naturopaths in a mixed care model, and the rapidly growing demand for their services. Ultimately, we should be united in our call for continuing cooperation between our respective governing colleges and representative associations in defining our overlapping, yet distinctly different, models for preventing and treating chronic disease. As Osler said, "The good physician treats the disease; the great physician treats the patient who has the disease". Our ND colleagues undoubtedly have much to teach us in the latter regard.

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CAMIG: Quick Facts

THOMAS KRAHN, CLASS OF 2017

Over 70% of Canadians regularly use Complementary and Alternative Medicine (CAM) therapies. Half of Canadian patients who visit their family physician will also be considering the use of alternative therapies. Despite patient acceptance of alternatives, attitudes and knowledge of Canadian physicians lag considerably behind those of physicians in the USA, Australia, and Europe.

These can include:
- Alternative medical systems (naturopathy, traditional Chinese medicine, homeopathy)
- Mind-body interventions (meditation, relaxation, prayer)
- Biologically-based systems (herbs, foods, vitamins)
- Manipulative and body-based methods (chiropractic and massage therapy)
- Energy therapy (qigong, haptic therapy)

Because of the growing acceptance of CAM, there is a need for awareness of these treatment modalities in future physicians. As well, an understanding of the evidence behind these therapies, and their potential value (i.e. in chronic back pain, arthritis, and mental health issues) will help the forward-thinking physician to be better able to advise his or her patients.

You are invited to explore the existence, evidence, and ethics of CAM in the **Complementary and Alternative Medicine Interest Group (CAMIG)**, which will feature speakers of various backgrounds and panel discussions on contemporary and controversial issues to complement your medical education.

Student Survey: Opinions about CAM

AERA JUNG, CLASS OF 2017

Enter the herbal section of the local supermarket and you are presented with a vast array of herbal remedies that guarantee to cure or alleviate. Complementary and alternative medicine (CAM) has entered the mainstream consciousness, with promises of possibilities beyond the limits of conventional medicine. Where do health care providers fit into this landscape? We are introduced to the concept of evidence-based medicine early on in medical school; it is the paradigm that is supposed to shape and guide our future everyday practice as physicians. Perhaps due to the large gap in evidence for many of its modalities, CAM is often pushed to the side; viewed by healthcare providers as unscientific and unreliable methods of treatment. But as physicians, we will no doubt have patients who will request various CAM therapies. Whether for or against, how will our own opinions affect patient care? We wanted to know what medical students thought about CAM, and sought to gather their opinions by surveying the 2016 and 2017 classes here at Queen's.

A large majority of the class (86%) said they would not go out of their way to find a natural remedy if they had a cold, and 89% of students said they believed conventional medicine to be more safe than CAM. Of the CAM modalities listed (Homeopathy, ColdFX, Herbal Remedies, and Traditional Chinese Medicine), just over half of the participants believed Traditional Chinese Medicine to be effective, while nearly one-third of the participants believed that none of the treatments listed were effective. However, 72% of participants also said that they would not deter their patients from taking CAM. It was interesting to note that when participants were asked to rate their own knowledge of CAM, nearly one quarter of the class listed their own knowledge as "good", while nearly one fifth listed it as being "poor". The full results are listed below.

Results: https://www.surveymonkey.com/results/SM-MWY9VGJ/

Gross National Happiness in Bhutan

ADAM MOSA, CLASS OF 2018

Top Left: On our first day in Bhutan, we passed grazing horses on a narrow road during a morning trek in Paro Valley. The high, altitude-thinned air forced us to measure our steps and carefully fill our lungs with less than full breaths. Often, we stopped to witness the placid valley, with the tall grass of the rice crop, and the sharp peak of Mount Jomolhari in the distance.

Bottom Left: Bhutanese trek-guides, Jigme and Ugyen, help a bus driver navigate a narrow pass between blasting sessions intended to widen the only national highway. Bhutan opened its borders to tourism in 1974. Over the past 40 years, the government has tried to carefully balance promotion and preservation of the unique culture and natural beauty of Bhutan.

Top Right: A birdseye view of the sacred Tiger's Nest monastery. This temple complex was constructed in 1692 and is precipitously perched above the pine forests of the Paro valley. The Guru Rinpoche is said to have flown here from Tibet on the back of a tigress. Traditional pray flags crisscross the landscape throughout this Kingdom.

Bottom Right: The Punakha Dzong (or "Palace of Great Happiness") on a beautiful clear day. Sitting at the confluence of the Pho Chu and Mo Chu rivers, this fortress was constructed in 1637 and served as the nation's capital and seat of government until 1955. Throughout Bhutan, dzongs continue to serve religious and administrative functions as well as hosting annual festivals.

Top Left: A young boy ran over to say hello when I was retracing the King's historic horse riding grounds by bicycle. The clouds were descending on the predominantly agricultural Punakha valley at dusk. In 2013, the Bhutanese government announced that they would become to worlds first 100% organic farming nation.

Bottom Left: A grandmother walks with young child through the foggy Gangtey Valley on our final day in Bhutan. Locals told me about the importance of multigenerational households in Bhutanese life.

Top Right: A mother macaque nurses her baby along a road leading to the mountain pass from Punakha to Bhumtang valley. Bhutan's rich biodiversity is a source of national pride. In 1995, a governmental ruling on forestry and logging was introduced to help preserve the pristine natural environment. Bhutan must now maintain at least 60% forest cover at all times. A nearby roadside sign admonished potential polluters with the words: "Remember nature is the source of all happiness."

Bottom Right: The evocative, fleetingly anthropomorphized bonfire sets the stage for women from Bhumtang valley to lead a ceremonial dance. Preservation of Bhutan's unique cultural identity is a practical concern of the government. For example, men and women are required to wear national dress at schools and government buildings. Here, the women are wearing the customary kira dress.

Has she been Vaccinated?

SARAH LUCKETT-GATOPOULOS, CLASS OF 2014

I paint circles on her hunched, bony, back, her pale skin staining pink under the gauze. She whimpers when my gloved hands press the sterile, adhesive plastic sheet to her skin, and I murmur something soft, something I hope is comforting to her feverish nine-year-old mind.

'Are her vaccinations up to date?' I had asked her mother, a well-educated, conservatively dressed woman who speaks in a way that makes me want to be her friend.

I had looked back to her daughter, supine on the emergency department bed, eyes squeezed shut against a blinding headache. She doesn't move her head – her neck is stiff and sore, and she has been vomiting. Her mum, appropriately concerned, tells me she's had a fever.

I've travelled west on elective, to a province in the midst of a measles outbreak. Here, almost every child has been vaccinated, whether out of fear, routine, or persuasive discourse. Even those I expect to be inexplicably anti-vaccination – the granola-crunching, wheatgrass-drinking set of which I count myself a member – are vaccinating their kids. I've already spent two days in this paediatric emergency department, and almost every parent I've spoken to has affirmed their child's status as fully immunised, or on their way.

Measles is the concern in this city, but I'm not worried about measles in this pre-teen. I'm hoping I don't need to worry about bacterial meningitis instead.

'We have chosen not to vaccinate our kids,' the pale girl's mother had told me, and my heart had sunk. When she spoke, she did so with an air of confidence, a note of defiance, a slight smile at the end of her sentence, as though she was daring me to question her judgement.

She came in worried about meningitis, but even in her educated fear about her child's illness, she challenged me to debate her.

I don't debate her because I'm too worried about the dark-haired little girl on the emergency department bed, who has not received acetaminophen, no ibuprofen for her pain. She received no medical attention before reaching this point of crisis. Instead, she has been drinking the traditional mountain tea of my European ancestors and taking Echinacea and oil of oregano to strengthen her immune system. Vitamin C tablets, B vitamins, zinc.

I thought of my own childhood, of hot olive oil dripped into my ear for an earache until I was finally taken to medical care, delirious with fever and infection. I thought of flower water to treat every ailment, and so many tablets of zinc that I vomited them onto the floor.

I thought of the MMR jab I took to the left arm three months ago, the meningitis shot I took on arriving at university, the flu vaccine I've had each year since I started medical school, and I examined the girl, who won't open her eyes, can't turn her head.

When, finally, I plunge a spinal needle into a space between her vertebrae, I say a little prayer that Echinacea, oil of oregano, and wheat-grass was enough.