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Incorporating Naturopathic Medicine into a Hospital Setting

One Institution's Experience

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Abstract

The number of patients seeking complementary health approaches combined with conventional treatments has grown considerably over the past decade. The current authors have previously described how an integrative medicine department was initiated and implemented at Beaumont Hospital, Royal Oak, Michigan. This article discusses how the integrative medicine department was expanded to include naturopathic medicine. This expansion was implemented because patients were taking herbs and supplements without their doctors' knowledge. This situation can be dangerous, especially for patients with cancer who are receiving chemotherapy, as various herbs and supplements can interact with treatment for these patients.

Because the State of Michigan does not offer licensing to naturopathic doctors (NDs), care had to be taken to identify highly trained and qualified NDs and to work within the legal parameters of the state. This article discusses why the integrative medicine department was expanded to include naturopathic medicine, how the naturopathic medicine program was structured, and what the role of NDs was within the department. Finally, as the department had more than 1500 naturopathic medicine appointments in 2014, this article illustrates that a naturopathic medicine program can be incorporated successfully into an integrative medicine department within a conventional healthcare system.

Introduction

With the rising costs of health care and the passage of healthcare reform emphasizing preventative care and controlling healthcare-related costs, many people are turning to complementary health approaches to augment conventional medicine. These techniques can be generally defined as med-

ical practices and products with origins typically outside of conventional Western medicine.¹ The use of complementary health approaches has increased in recent years in the United States, with 33% of Americans using at least one type of complementary medicine in 2012.¹ The use of nonvitamin, nonmineral dietary supplements is the most commonly used complementary approach with ~17% of U.S. adults taking some type of these supplements.¹ Therefore, understanding the mechanisms of action of herbs and supplements and how they interact with other ingested substances is critically important to consumers' safety and health.

The current authors have previously discussed how their institution incorporated integrative medicine successfully into conventional hospital-based care.² The integrative medicine department started small in 2004, offering only clinical massage, Reiki, and guided imagery to oncology patients. The program has expanded over the years and now also offers acupuncture, yoga therapy, reflexology, CranioSacral therapy, integrative nutrition services, functional medicine, and naturopathic medicine to all patients. Of these, naturopathic medicine has been the most challenging modality to incorporate into the integrative medicine program. This article discusses the current authors' experiences in incorporating naturopathic medicine successfully into a conventional hospital system's integrative medicine department.

What is Naturopathic Medicine and Why Offer It?

Naturopathic medicine is a healthcare method that "emphasiz[es] prevention, treatment and optimal health through the use of therapeutic methods and substances which encourage the person's inherent self-healing process, the *vis medicatrix naturae*" according to the American Association of Naturopathic Physicians.³ Naturopathic medicine emphasizes prevention and treating the whole person to address medical

issues. A naturopathic doctor (ND) uses evidence-based complementary health approaches to diagnose and treat patients; these approaches encompass nutrition, herbal medicine, homeopathy, lifestyle counseling, and mind–body medicine. Functional medicine/integrative medicine physicians and NDs have different training, experience, and tools, but have considerable overlap in philosophies regarding treatment of the whole person, the search for the root cause of an illness, and the emphasis on prevention and lifestyle changes as a cornerstone of treatment. Both kinds of practitioners may utilize natural remedies, although NDs have more training and experience in that area. The physician has the added option to prescribe pharmaceuticals, if indicated.

A board-certified ND has completed 4 years of a premedical undergraduate curriculum, 4 years of graduate school at an accredited naturopathic medical college (of which, there are only 7 in North America), and has passed the North American Naturopathic Physician Licensing Examination. In some cases, an ND goes on to a residency program, and some NDs specialize in their practices. For example, some NDs specialize in naturopathic oncology; those who pass board certification in this area are considered Fellows of Naturopathic Oncology.

Adding naturopathic medicine to the integrative medicine program was first considered for the simple but important reason that patients take herbs and supplements without the knowledge or approval of their physicians. In the United States, one survey showed that almost 19% of responders took some type of herb or supplement in the year prior to the survey; however, only ~30% of these responders shared this information with their physicians.⁴ Furthermore, according to the Centers for Disease Control and Prevention, ~34% of Americans responding to a survey were taking some type of supplement along with a prescription medication.⁵ The U.S. Food and Drug Administration (FDA) has cautioned that “[c]ertain dietary supplements can change absorption, metabolism, or excretion of a medication and therefore affect its potency.”⁵

The field of nutraceuticals is vast and constantly changing.

However, even when physicians are aware that patients are taking herbs and supplements, most physicians do not have the in-depth training or time required to allow them to understand fully how herbs and supplements function or how they interact with other supplements and with other medications the patient may be taking. The field of nutraceuticals is vast and constantly changing.^{6,7} Therefore, a complete understanding of this field may extend beyond the scope of an allopathic doctor. Furthermore, taking any supplements without a physician’s knowledge is particularly dangerous for a patient with cancer who is receiving chemotherapy. One review showed that 64%–81% of cancer survivors take herbs and supplements;⁸ how-

ever, according to another survey, less than half of oncologists discuss supplement intake with their patients.⁹ Many oncologists have indicated that a lack of knowledge and education prevents them from having such discussions with their patients.⁹

It is a matter of concern that any supplement that changes the absorption, metabolism, or excretion of a chemotherapeutic agent would adversely impact that chemotherapeutic agent’s action. The integrative medicine program was originally established for patients with cancer, and their oncologists were calling the integrative medicine department to inquire about the herbs and supplements that their patients were taking. One patient in particular was taking a substance that was highly dangerous. This situation prompted the current authors to search for and identify the experts in this field. Through this search, the current authors realized that the expert needed was an ND, and this situation emphasized the need for a fully trained and dedicated naturopathic medicine expert in the integrative medicine program.

Implementation: Challenges and Solutions

Structure—How to Incorporate NDs into a Hospital Setting

Incorporating NDs into the integrative medicine department required consultations with the Legal Department. Licensed NDs are guided by the licensing requirements of their states. In general, a licensed ND can diagnose and treat patients in accordance with their scope of practice, which typically includes ordering bloodwork and writing pharmaceutical prescriptions. Because Michigan does not license NDs, an ND does not have a legal scope of practice in Michigan. However, the Michigan Public Health Code defines the legal parameters for delegation by a licensed healthcare professional within the licensee’s scope of practice to unlicensed persons. Under this code, a licensed physician may delegate tasks, acts, and functions to an unlicensed person if that person is qualified by education, training, and experience. Furthermore, these tasks, acts, and functions must lie within the licensed delegator’s scope of practice and must be supervised by the licensed delegator.

Therefore, based on the legal parameters established by the State of Michigan, the NDs in the Beaumont Health integrative medicine program are established as delegates under a licensed physician. The licensed physician determines what will be delegated to the ND and determines the protocols for an ND to follow in delivering the delegated care services. Furthermore, the licensed physician supervises the ND regularly. However, to avoid medical and legal risks, an ND’s role must be defined clearly to comply with State law. For example, the NDs in the integrative medicine program do not perform physical examinations and do not write prescriptions.

Furthermore, all patients are expected to have a primary-care physician before visiting an ND in the integrative medicine program, and all ND consultations include a referral to a primary-care physician for a physical examination. In addition, each of the NDs must hold an active license from another state. This requirement ensures that each ND has been trained

properly and is maintaining his or her licensure in a state that has established a licensed scope of practice for a ND. This careful structuring of the naturopathic medicine program within the hospital system has allowed NDs to deliver care effectively while limiting legal and medical risks for patients and for the healthcare system.

The lack of licensing presents an obstacle to recruiting NDs, who are simply not attracted to a state where they are not able to practice to the full extent of their education and training. Finally, ND services are not covered by most health insurance plans, and patients typically have to pay out-of-pocket for a consultation with an ND.

Initiation

The initiation of a naturopathic medicine program at the current authors' institution was implemented in a similar fashion as the initial implementation of the integrative medicine program—slowly and thoughtfully. Adding naturopathic medicine was not initiated until after 4 years after the integrative medicine program had been established. At that time, the program had a good reputation within the hospital, a credible relationship with physicians and staff members, and a solid client base. However, even with this established relationship between the integrative medicine program and hospital physicians and staff members, the introduction of a naturopathic medicine component required additional education and awareness to alleviate uncertainty.

Gaining the trust of the allopathic medical practitioners in the institution was required when the integrative medicine program was initially established²; however, adding naturopathic medicine was an additional challenge, even when other complementary health approaches had been accepted. While other complementary health approaches, such as guided imagery and clinical massage, have little if any side-effects or contraindications, herbs and supplements and nutraceuticals can have systemic effects or adverse interactions with other medications. Furthermore, the lack of licensing again played a role in this situation. Without state licensing, it was difficult to identify a qualified ND—one who had received complete education and training at an accredited naturopathic medicine college. Unfortunately, many allopathic physicians had encountered less-qualified naturopathic medicine practitioners and had experienced or observed adverse outcomes associated with the use of naturopathic medicine.

In addition, various unsubstantiated claims regarding so-called “natural” cures and “quick fixes,” some of which are quite dangerous,^{10–13} have perpetuated the misgivings of allopathic physicians. These negative experiences had to be overcome for naturopathic medicine to be accepted in a conventional healthcare system.

Therefore, a key aspect of expanding integrative medicine to include naturopathic medicine was strategic marketing to early adopters and likely supporters. This marketing strategy was implemented to educate hospital physicians and staff members about naturopathic medicine and to emphasize that, as with the other complementary health approaches offered through

the integrative medicine program, the naturopathic medicine program would be indeed integrative medicine and not alternative medicine. Because a working relationship had already been established between the integrative medicine department and certain other hospital departments (such as oncology and urology), naturopathic medicine was embraced as an expansion of the integrative medicine department; however, ongoing education and dialogue was critical to encourage acceptance and ensure continued cooperation between departments. One of the ways that early adopters were able to become comfortable with the service was the coordination of recommendations post visits. The NDs would communicate their patient summaries, including recommended supplements, to the referring physician. This procedure ensured continuity of care and strengthened the relationships between providers.

Realization

Naturopathic Doctor Practice

It can be challenging to incorporate naturopathic medicine into a conventional healthcare system because of the nature of the ND practice. An initial appointment with an ND typically involves two 1-hour appointments, 2–3 weeks apart. Follow-up visits after the initial consultations are typically ½ hour in length, which is still longer than a typical allopathic physician appointment. These lengthy appointments limit the number of patients for an ND and increase the cost of each appointment. However, the lengthy appointments are critical for the ND practice. During these appointments, an ND covers all aspects of a patient's life and circumstances to obtain a complete picture of the patient as a whole.

In addition to discussing any physical issues or complaints, the ND will inquire about a patient's emotional state, spiritual health/practices, sleep patterns, exercise habits, support network (family/friends), stress/grief, relationships, leisure activities, environmental or toxic exposures (cosmetics/cleaning products, etc.), and diet and herb and supplement use. Patients are asked to bring all medications and herbs and supplements with them to the appointment so that exact information regarding the names and doses can be obtained and to allow for the assessment of brands/qualities and cumulative doses. Frequently, the ND instructs a patient to discontinue the use of certain herbs and supplements and simplifies that patient's intake. Patients often take herbs and supplements based on advice from the internet or friends and family, which, while well-intentioned, can be (at best) useless or (at worst) dangerous. Patients with cancer are particularly vulnerable to false claims of “cures” for their disease. Instead, the ND provides recommendations based on each patient's need and on current best evidence.

The Electronic Medical Record

As the naturopathic medicine program expanded to be open to the entire hospital, the NDs gained access to the electronic medical record (EMR) system. All notes and recommendations

are added to each patient's record. Furthermore, in oncology, the ND works closely with the oncologist to ensure that both the patient and the oncologist are comfortable with the recommendations by the ND. Originally, at the program's inception, the ND provided a referenced recommendation plan to the oncologist for each patient, and the oncologist would then proceed to discuss the recommendations with the patient. Currently, after years of building trust between the departments, oncologists no longer require their preapproval for herb and supplement recommendations. However, the oncologists do retain veto power for any herb/supplement use. Finally, all notes from the ND (and, in fact, notes from all practitioners in the integrative medicine department) are entered into the patient's EMR and are available for viewing. In this way, the allopathic physicians and integrative medicine practitioners have open dialogue with regard to patient care, and the delegating physician has full access to evaluate and supervise the ND through reviewing the ND's record entries.

Pharmaceuticals/Nutraceuticals

The herbs and supplements available to patients were another topic of concern. Herbs and supplements are not highly regulated by the FDA. In fact, "[d]ietary supplements are not required by federal law to be tested for safety and effectiveness before they are marketed."¹⁴ However, it is of particular concern that the FDA does not monitor the quality of the marketed herbs and supplements. Although the FDA has established Good Manufacturing Practices (GMPs) for dietary herbs and supplements, the burden is on the manufacturers to ensure compliance. "Manufacturers are now expected to guarantee the identity, purity, strength, and composition of their dietary supplements."¹⁴ The FDA does take action against manufacturers if their products are found to be unsafe, adulterated and/or misbranded.⁵ However, with no required third-party testing or oversight to ensure that manufacturers comply with the GMPs, the reality is that some available herbs and supplements simply do not contain the stated ingredients, while others do contain the ingredient of interest, but at levels too low to have an effect. For example, it has recently been reported that 30% of marketed probiotics do not contain the listed levels of organisms.¹⁵

Therefore, to ensure the quality of herbs and supplements, the integrative medicine department now has an herb and supplement dispensary under the governance of the hospital pharmacy. Some herbs and supplements are available over-the-counter to anyone who wishes to purchase them. However, most of the available herbs and supplements require either a written recommendation from 1 of the NDs or a written request from an allopathic physician (within or from outside the system). These herbs and supplements are high-quality, pharmaceutical-grade; have been subjected to third-party testing; and are only available to healthcare providers. In addition, the herbs and supplements are transported and stored properly, thus ensuring maximum potency. These procedures ensure patient safety, while maximizing the benefits of the herbs and supplements, and the money generated by the dis-

pensary helps to offset the costs of the naturopathic medicine program.

Ongoing Challenges and Current Operations

The main challenges regarding incorporating a naturopathic medicine program into the department revolved primarily around the lack of licensing in this state. There is a shortage of qualified NDs, as trained, competent NDs frequently work in states that have licensing, where they can practice to the full extent of their education and training. In a state that does not license NDs, the system must have a licensed physician who is willing to act as a delegator to the nonlicensed ND practitioner. In addition, the ND practice is a time-intensive, individualized approach that does not always fit well into a conventional healthcare system structure. For NDs to be integrated successfully, the hospital as a whole must be willing to support the entire program. Finally, NDs who work in a conventional health care system must be willing to conform to the system's standards and requirements that may include a dress code and mandatory yearly flu shots and testing for tuberculosis.¹⁶

Ongoing education and dialogue is essential to promote acceptance of naturopathic medicine by allopathic physicians and other hospital staff members to overcome bias or distrust. In addition, there is commonly confusion regarding the differences between an ND and a functional medicine doctor. While the two practitioners have similar backgrounds, they do provide different services. Their scopes of practice should be clearly defined to reduce confusion and competition, and to provide patients with appropriate care.

However, despite these challenges, expanding the integrative medicine department to include a naturopathic medicine program was a rewarding experience. The hospital was very supportive of integrative medicine overall and the naturopathic medicine program as it has expanded. In fact, the hospital employee healthcare plan now covers ND visits, acupuncture, and massage therapy sessions for employees with selected diagnoses. The relationship between the naturopathic medicine and the oncology departments, in particular, has been enormously beneficial for patients, as these patients and their oncologists now have confidence regarding their herb and supplement intakes.

Overall, anecdotally, there was a tremendous positive response from patients who were pleased to have their questions regarding herbs and supplements answered, a trusted source of information, and available high-quality herbs and supplements. As a testament to the need for the naturopathic medicine program, in 2014, the integrative medicine department had more than 1500 appointments for naturopathic medicine, making it the system's third most popular modality after clinical massage and acupuncture. Finally, the integrative medicine program is now expanding to include a holistic registered dietician, because patients have many questions regarding diet during their illnesses and treatments. Because of time constraints, it is more efficient (and therefore more financially prudent) to hire a holistic registered dietician to support NDs and allopathic

physicians. These continued expansions to the program allow for a broader array of services offered to patients.

A Case Report

A case report of a 58-year-old woman illustrates how naturopathic medicine can be used to improve patient health and well-being.

Presentation

This patient presented to the integrative medicine department for help with weight loss, gastroesophageal reflux disease (GERD), fatigue, hot flashes, and “aches and pains.” She also wanted nutritional counseling. The initial appointment with the ND revealed that this patient had a stressful sedentary desk job and moderate-to-low stress at home. She had a long history of gastrointestinal issues, including irritable bowel syndrome (IBS) and GERD, and was taking 20 mg of omeprazole two times per day. She was also taking metformin for blood sugar control and Flonase® for occasional sinus irritation.

Evaluation

No physical examination was performed; however, she was referred to her primary-care physician for a yearly physical examination. The following tests were performed prior to initiating treatment: thyroid-stimulating hormone; T3; T4; complete blood count; vitamin D levels; four-point salivary cortisol, and dehydroepiandrosterone level; hemoglobin A1c level, comprehensive metabolic panel; and C-reactive protein—high sensitivity (CRPhs). A celiac screen was not performed because the patient had been gluten-free for several months at the time of testing. The conventional/Western medical diagnosis was GERD, IBS, menopause, and vitamin D deficiency. The naturopathic diagnosis was adrenal fatigue, menopause, food sensitivity, and vitamin D deficiency.

Treatment

The patient was advised on how to modify her diet and instructed to increase her water intake and decrease her coffee intake. In addition, she was advised on which supplements to take to lower her cortisol levels, decrease her CRPhs, correct her vitamin D levels, normalize her bowel function, and manage her hot flashes. Recommendations to change her lifestyle were also provided, including increasing physical activity and taking vacations to reduce stress. Acupuncture was advised to control hot flashes and manage her GERD symptoms, aches and pains, and stress.

Results

After 1 year of naturopathic treatments, this patient had weaned down to 20 mg of omeprazole every other day or as needed; she was also able to eliminate the need for metformin and Flonase. Her bowels had improved; however, she still occasionally had some symptoms of GERD. Her hot flashes were reduced, but she still had ~1 per week. Her energy had

increased, and she had gone down 3 dress sizes. The patient reported an overall improvement in well-being.

Conclusion

Naturopathic medicine can be incorporated effectively into a conventional, hospital-based health care system, even in a state that does not license NDs. To maximize the chance of success of the naturopathic medicine program, naturopathic medicine was included only after the integrative medicine program was established successfully with a working relationship with other hospital departments and a solid client base. Defining the scope of practice of the ND is critical, especially in a state that does not license NDs. However, with an appropriate structure based on legal guidelines, an ND can function effectively.

The reasons for including a naturopathic medicine program in a hospital system primarily involve patient safety—as patients are using herbs and supplements, and might not be discussing such use with their physicians. This situation is of particular concern for patients with cancer, who may be taking herbs and supplements based on the recommendations of family, friends, or an unqualified practitioner along with chemotherapy regimens. In addition, offering naturopathic medicine expands the kinds of services offered to patients, who are generally pleased with having a trusted source of information regarding herbs and supplements, as evidenced by the large number of naturopathic medicine appointments in 2014.

Other challenges involved in incorporating a naturopathic medicine program into a conventional health care system include the lack of acceptance by allopathic physicians. In this situation, open dialogue and ongoing education are critical, as is ensuring the use of trained, qualified NDs. Furthermore, NDs working in a conventional health care system must be able and willing to work within a allopathically conservative environment and conform to hospital standards and requirements.

It can be challenging to incorporate naturopathic medicine into a conventional health care system, especially in a state that does not license NDs. However, with care and an appropriate structure in place, naturopathic medicine can be implemented successfully to the benefit of patients and physicians.

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