E D U C A T I O N

Development of a Hospital-based Massage Therapy Course at an Academic Medical Center

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Background: Massage therapy is offered increasingly in US medical facilities. Although the United States has many massage schools, their education differs, along with licensure and standards. As massage therapy in hospitals expands and proves its value, massage therapists need increased training and skills in working with patients who have various complex medical concerns, to provide safe and effective treatment. These services for hospitalized patients can impact patient experience substantially and provide additional treatment options for pain and anxiety, among other symptoms. The present article summarizes the initial development and description of a hospital-based massage therapy course at a Midwest medical center.

Methods: A hospital-based massage therapy course was developed on the basis of clinical experience and knowledge from massage therapists working in the complex medical environment. This massage therapy course had three components in its educational experience: online learning, classroom study, and a 25-hr shadowing experience. The in-classroom study portion included an entire day in the simulation center.

Results: The hospital-based massage therapy course addressed the educational needs of therapists transitioning to work with interdisciplinary medical teams and with patients who have complicated medical conditions. Feedback from students in the course indicated key learning opportunities and additional content that are needed to address the knowledge and skills necessary when providing massage therapy in a complex medical environment.

Conclusions: The complexity of care in medical settings is increasing while the length of hospital stay is decreasing. For this reason, massage provided in the hospital requires more specialized training to work in these environments. This course provides an example initial step in how to address some of the educational needs of therapists who are transitioning to working in the complex medical environment.

KEY WORDS: hospital-based massage; massage therapy; massage therapy course; massage therapy training and skills

INTRODUCTION & BACKGROUND

Massage therapy is one of the top two services provided in both outpatient and inpatient settings. It is most often prescribed by physicians and noted most likely to be beneficial and least likely to cause harm^(1,2). Patients who are hospitalized experience pain and anxiety that may slow recovery by limiting their ability to cough and breathe deeply, move, sleep, and participate in daily self-care activities⁽³⁾. Having access to complementary and integrative therapies, such as massage, acupuncture, and relaxation therapies, may impact the patient experience substantially⁽⁴⁾. Research has shown that massage therapy is an effective tool for pain and anxiety, with the added benefit of few adverse reactions^(1,5-8). Studies conducted at the medical center with surgical patients found that tension, stress, pain, and anxiety were improved with the offering of massage⁽⁹⁻¹¹⁾.

Specialized education is needed for hospital-based massage because the hospital setting requires additional skills not currently taught in the massage therapy classroom. Current massage therapy training differs from state to state, with little or no current standard training or credentials for hospital-based massage. A massage therapist in the hospital setting must have the proper, medically based massage education, as well as hands-on experience, to meet the highest possible standards as set by the medical profession. The therapist needs to be able to navigate throughout the hospital, document appropriately, and communicate effectively with hospital staff-for example, navigation of the patient chart, accurate documentation, and pressure considerations due to incision sites, platelet counts, and integrity of skin. This article summarizes the initial development and description of a hospital-based massage therapy education program at a Midwest academic medical center. This program is a step forward for the massage therapy profession in delivering the necessary foundation for skills needed when working in a health care environment to provide safe and effective massage for hospitalized medical and surgical patients.

At a large Midwest medical center, cardiovascular surgery patients frequently mentioned concerns

regarding pain, specifically in the back, neck, and shoulder areas, that was not completely relieved with medications. In an effort to address their concerns and improve pain management for these patients, a quality improvement team was assembled, that consisted of surgeons, nursing leaders, and the CIM program physician, to explore what could be offered for these patients. An initial pilot and subsequent research study on massage offered to patients indicated that massage was beneficial for decreasing pain, anxiety, and tension for these patients^(9,10).

In 2009, a Midwest academic medical center hired two part-time massage therapists to assist cardiovascular patients with postoperative pain and anxiety management. Neither therapist had prior training in hospital-based massage, but each had more than 1,000 hours of training, and had work-related background or experience in the hospital setting. One therapist worked as a physical therapy assistant for 17 years in a sports medicine orthopedic clinic before becoming a certified massage therapist; the other therapist provided massage services at a wellness clinic in Canada, working with various integrative medicine practitioners for five years before moving to the Midwest. This latter therapist was able to become both a hospital volunteer who provided hand massage for patients and their families and a hospice volunteer.

Approximately one year later, the medical center hired a massage therapist to work 20 hours per week with patients who had colorectal surgical procedures. This massage therapist had worked at the medical center as a patient care assistant for the previous 14 years. The three massage therapists were providing in-hospital massage therapy across the medical center to some of the most acutely ill patients with complex conditions. Given the complexity of these conditions, it quickly was realized that the massage therapists had to expand their education and expertise to meet the needs of the patients. At the time, there were only a few resource books and articles that provided a background in massage for frail medical patients^(12,13).

For these massage therapists, the complexity of the hospital environment included communication with surgeons and allied health care workers, maintenance of patient confidentiality and patient safety, positioning patients around their tube lines and incisions, adaptation and adjustment of pressure and massage techniques, adjustment working with patients at the end of life, navigating the medical records, and correct documentation. To gain these skills, the therapists attended a two-day, hospital-based massage course offered at an accredited health sciences university, which proved to be an in-class lecture with no handson, practical component.

As awareness of the availability of massage therapy for patients began to spread throughout the hospital, the massage therapists' roles expanded into other specialty areas. During this expansion into these specialty areas, such as pediatrics and oncology, they realized that the current state of education for in-hospital massage therapy was lacking. The Academic Consortium for Complementary and Alternative Health Care also came to this realization and dedicated resources to explore the necessity for standard levels of training and skills needed for massage therapists to safely work in the hospital setting.

The three massage therapists wondered how a recent massage therapy graduate with 500 hours of training would fare in the hospital environment and work alongside other integrative medicine personnel. They knew they were in a unique medical environment and recognized an opportunity to develop an education program for massage therapists with little or no experience who were working in mainstream health care. They also knew firsthand what was lacking in their own training:

- Ability to work safely in an acute-care medical environment
- Patient documentation and charting
- Medical terminology
- Navigation of the hospital environment
- Effective communication with other health care workers
- Management of infection control
- Adaptation of massage techniques and pressure for medically frail patients

Self-care also would need to be addressed because of the physical, emotional, and spiritual demands of the work. The massage therapists learned firsthand that providing massage for hospitalized patients requires frequent adjustments in body mechanics. Patients in the hospital are in either hospital beds or chairs and are often attached to various pieces of medical equipment. Patients are often restricted in positioning choices because of pain level, tubes, lines, and surgical incisions. This situation introduces a challenge for ideal positioning of the patient and the massage therapist. Working with patients who have a life-changing diagnosis and hearing their stories can at times be overwhelming for the therapist. Patients often share their journey, fears, and hopes with the massage therapist. This sharing requires a great deal of presence, reflective listening, and compassion on a daily basis. It can be emotionally and spiritually draining when the therapist is not practicing selfcare regularly.

Any hospital massage training needed not only to be in a classroom setting, but also to be experiential in order for students to fully understand the complexity of the practice. Because of the distinctive backgrounds and extensive on-the-job learned skills in working at a large, acute-care medical center, these massage therapists recognized their opportunity to create an innovative, first-of-its-kind, hospital-based massage education program. The program would be for all massage therapists who have completed an associate degree in massage therapy and were looking to explore and gain skills in a hospital setting or medical facility.

METHODS

Creating a Hospital-based Massage Therapy Course

Initial steps

When the concept of the course was first discussed among the massage therapy team, it quickly became evident that accurate identification of key stakeholders within the medical center was critical to ensuring the program's initial approval and ongoing success. Five groups were identified: complementary integrative medicine (CIM) program leadership, including the operations administration; the Academic and Faculty Affairs Subcommittee within the institution's health sciences school; the health sciences school's Education Committee; and the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB).

Formal discussion began with CIM program leadership (composed of CIM physician director, CIM physicians, operations administrator, and CIM program coordinator) to vet proof of concept and program justification. CIM leadership support was

secured through approaching the physician chair of the Division of General Internal Medicine within the Department of Medicine. Continuing discussions with operations administration led to further justification and financial effect analysis scenarios. After the administration gave its approval, a formal proposal was brought to the academic approval committee for the institution's health sciences school. This proposal included an overview of the massage therapy profession, current training available at the national level, workforce predictions, financials, program outline, and institution benefits. The course was approved as a professional enhancement course and forwarded to the school's Education Committee for its formal approval. Finally, the application to become a continuing education provider through the NCBTMB was completed and approved. The next steps were to meet with the school's operations manager to identify the student enrollment process, including orientation, registration, finance options, and application forms (Figure 1).

Collaboration in course development

The team, including a) the massage therapists, b) the CIM program coordinator who coordinates all integrative medicine services across the institution, including massage, acupuncture, and animal therapy, and c) the integrative nurse specialist who works

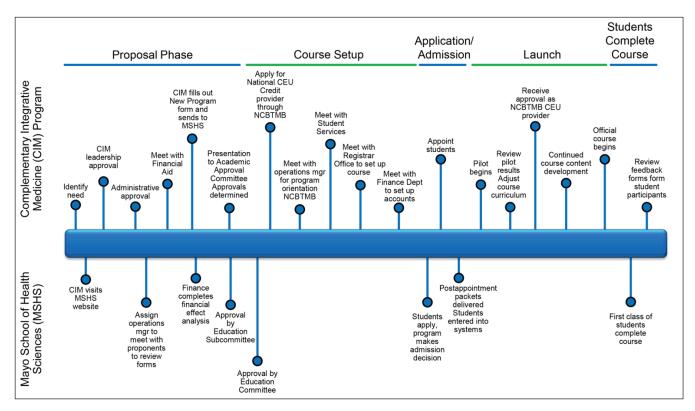


FIGURE 1. Timeline of development of hospital-based massage therapy course. CEU = continuing education unit; mgr = manager; NCBTMB = National Certification Board for Therapeutic Massage and Bodywork.

in the CIM, collaborated and created the "Massage Therapy in the Hospital Setting" initial course content and program competencies (Table 1) for practicing massage therapists who desire to learn more about working with hospitalized patients and medically frail persons. The Blackboard online education platform (Blackboard Inc., www.blackboard.com) was selected to begin the initial segment of this course. A Web-based course management system, Blackboard allows instructors and course designers the ability to deliver interactive, online courseware. It was specifically chosen because students are able to access it both inside and outside the institution firewall, giving the desired flexibility for working students to complete assignments in conjunction with their schedules. Blackboard also facilitates access to course materials within multiple media formats, administration of tests and quizzes, facilitation of online discussion with fellow students and instructors, submission of course assignments, viewing the course syllabus, and checking grades.

The second part of the education development involved creating an in-person, week-long didactic and simulation training presented at the medical center. Innovative learning opportunities had to be considered in order to offer students a unique precursor to the real-life experience in the hospital. Taking this into account, the medical center's simulation center was incorporated into the curriculum as a lead-up to actual hospital experience. Simulation-based medical education provides a controlled environment created to imitate real-life patient care, in a setting where students can practice and master their skills without putting patients at risk⁽¹⁴⁾. Actors play the role of the patient in various medical scenarios in the simulation center. Assorted scenarios are given to the students, who are able to use their critical thinking skills in a controlled setting. Each scenario is videotaped for student and educator review and evaluation. Participation in this innovative learning opportunity allows the student to feel more prepared for actual hands-on experience in the hospital.

The first course offering

The course was first piloted to a volunteer group of massage students and their instructors from a local massage training program comprised of one man and five women. The pilot course was offered at no charge to the participants. This group was to provide critical feedback and suggestions for improving the course. The course was split into Module 1, an online Blackboard classroom, and Module 2, in-person learning.

Estimated completion time for Module 1 was eight to 10 hours. There was daily check-in with the students to monitor their progress, answer questions, and provide feedback. Module 2 involved a one-week intensive (40 hours) in-person classroom learning environment on the science of massage in a medical setting. The curriculum was focused around safely

working with hospitalized patients. Hands-on learning included working with a hospital bed, positioning the patient, and applying pressure modifications. Additional content included safety protocols and procedures in adherence with hospital standards. At the end of the week, the learned skills were incorporated into the simulation center, where the students took part in hands-on, real-life situations.

Throughout Module 2, guest speakers involved in integrative medicine described what their roles were throughout the hospital. During one afternoon, panels consisting of collaborating physicians, physician assistants, surgeons, nurses, physical therapists, and chaplains discussed how massage has a role with their individual department. They also discussed how massage therapy has been incorporated into busy hospital units.

Initial pilot course feedback

Initial feedback was obtained daily through written feedback forms and oral comments solicited from participants at the end of the course. The feedback forms reflected a rating scale from one to five, with one strongly disagree and five strongly agree in the following categories: segment objectives were consistent with the course, course material was upto-date and well organized and was presented in sufficient depth, audiovisual materials were relevant and of high quality, handout materials (if used) enhanced course content, and the presenter was appropriate, organized, and professional. In addition, there was a section for participant comments. Every course segment was subject to this feedback. A great deal of positive feedback was received from the participants after course completion. Many students commented on how this experience was "eye opening." Several comments made reference to how being an in-hospital massage therapist was much more than providing "a massage in the hospital setting." Participants learned of the many unforeseen situations that can arise in the hospital and the need to know how to respond appropriately. They learned a great deal from the real-life scenarios during the simulation portion and from experiences in the classroom (i.e., working around a hospital bed). Many participants commented to specifically wanting more hands-on learning time in the classroom and in the actual hospital setting (Table 1).

Responding to the pilot feedback

Since participants wanted more time dedicated to hands-on learning, the course was modified in the following ways:

- More content offered in the classroom was placed into the Blackboard online coursework
- Guest speakers and panel discussion times were limited and offered throughout the week as "lunchtime learnings"

TABLE 1. Comments of Pilot Participants of Massage Therapy in the Hospital Setting

- "I felt the course really helped prepare me for what I can do for an acute-care hospitalized patient. So many times our training is geared toward teaching us what we can't do or what is contraindicated, but I feel this class flipped the paradigm upside down"
- "It taught us how to modify our massage so it was safe for the patient and prepared us to not only massage, but also be a healing presence with the patient"
- "Layout of the hospital room and how to give a massage in a hospital room while using correct body mechanics"
- "More pathopharmacology"
- "More medical terminology"
- "More medical documentation"
- "This course is intense and will definitely require a lot of your time, but it is worth it in the end"
- "The huge emotional piece that is involved with being a hospital-based massage therapist"
- "More hands-on scenarios with positioning and operating the hospital bed"
- "I really like the entire integrative medicine team delivering this training"
- The curriculum was revised by removing topics not pertinent to the learning—for example, music therapy, animal therapy, and humanities in medicine.

A final module was added to the course that would be a 25-hour, in-hospital, one-on-one internship with the student and the massage therapy instructor. The intention for the final module would be to provide more hands-on time with the massage therapist mentor in the actual hospital setting.

Implications for the Profession of Massage Therapy

Through research into current training offerings for massage therapy graduates, it was clear that comprehensive hospital-based training is lacking. Many specialized trainings, such as oncology, palliative care, end-of-life care, manual lymph drainage, and aromatherapy (to name a few), can be used for enhancing a patient's healing. But these offerings are piecemeal at best. A specifically designed hospitalbased educational program and setting would allow a massage therapist to be immersed in the expanded role of a hospital-based massage therapist. This initial pilot of a hospital-based massage therapy course is an example of the first step in the right direction⁽¹⁵⁾. Future programs should be developed and refined, and should include ongoing needs assessments for hospital massage therapy practice, specific course objectives, and additional competence evaluation measures. This would also allow an opportunity for massage therapists to research the outcomes and impact of these types of programs.

DISCUSSION

As interest in hospital-based massage therapy and integrative medicine services grows, massage therapy programs are needed to teach the skills necessary to work in complex medical environments. Research

suggests that massage therapists can have a significant effect on the symptoms of pain, anxiety, and tension of hospitalized patients^(9,10). However, with advanced skills and knowledge about how to work in the medical setting, the profession of massage therapy will set a new standard and expectation for integrative medical care. Massage provided in the hospital requires more specialized training for the safety of patients who have complex medical concerns. Statements such as "hospital-based massage therapy is massage therapy that is based in a hospital setting," as stated in an article in the November 16, 2010 newsletter of the American Massage Therapy Association⁽¹⁶⁾, may not be completely accurate today. Massage therapists need to know the patients' health history, the procedures they have had or are waiting for, laboratory values, and medications in order to understand how a massage needs to be altered for patient safety and effectiveness. Stringent protocols and procedures in the hospital setting are different from private massage practice. A program in the hospital setting would allow the therapist to be immersed in the role of the hospital-based massage therapist. Learnings from this initial course development set the groundwork for ongoing rigorous curricular development and its refinement, and opportunities for program research with specific pre- and posttest designs.

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CONFLICT OF INTEREST NOTIFICATION

The authors declare there are no conflicts of interest.

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