



MASSAGE THERAPY RESEARCH UPDATE HOSPITAL BASED MASSAGE

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Welcome to Massage Therapy Research Update. It is my pleasure to bring you synopses and commentary on current, important massage therapy research publications.

This edition will focus on questions about massage therapy in hospital settings. I have collected three articles: one based in Australia, one in Canada, and one in the U.S., that document trends in hospital-based massage therapy. All of the articles are open-source, and may be accessed free of charge – I encourage you to do so.

Hospital-based massage therapy may not be a common intervention in New Zealand at this time, but for anyone interested in creating such a program, these articles can provide a wealth of information.

We'll begin with a 2012 study about massage therapy in a cardiac surgery unit in Melbourne, Australia:

Braun LA, et al. Massage therapy for cardiac surgery patients—a randomized trial. *Journal of Thoracic and Cardiovascular Surgery* 2012 Dec;144(6):1453-9, 1459.e1. doi: 10.1016/j.jtcvs.2012.04.027. Epub 2012 Sep 7.

Available at [http://www.jtcvsonline.org/article/S0022-5223\(12\)00868-9/fulltext](http://www.jtcvsonline.org/article/S0022-5223(12)00868-9/fulltext)

This project compared massage therapy to quiet rest for people recovering from cardiac bypass and/or heart valve surgery at the Alfred Hospital in Melbourne, Australia.

The researchers' premise is that massage therapy is usually safe and welcomed by patients, so perhaps it could be incorporated into the post-surgical care of cardiac patients with the goal of reducing pain, anxiety, and muscle tension. Secondary outcomes looked at whether massage therapy produced any significant changes in heart rate, blood pressure, or respiratory rate, as compared to the control group, who were given a quiet rest period. They also compared the patients' sense of relaxation, and their satisfaction with their care. Finally, the researchers asked whether instituting this intervention is feasible in a busy cardiac surgery ward setting.

The study was conducted between April, 2009 and January, 2011. Patients were in the facility for cardiac bypass surgery or cardiac valve replacement, or both. A total of 146 patients were randomized into the intervention group (n=75), and the control group (n=71).

Each participant in the intervention group received two treatments: twenty-minute massages were given on days 3 or 4 post-surgery, and again on days 5 or 6. Sessions always happened between noon and 4 pm. The massage therapists explained what they would be doing. Patients chose what part of the body they wanted to have addressed, and they could receive massage in bed, sitting on the edge of the bed, or sitting in a chair.

A project coordinator trained the therapists for the study. The techniques were based in Swedish massage with moderate pressure, and highly individualized to the desires and needs of the patients. The hospital supplied hypoallergenic lubricant, and the massage sessions were free of charge.

By contrast, the control group was given two twenty-minute sessions of quiet relaxation time with no interruptions.

Measures, including heart rate, blood pressure, respiratory rate, and visual analogue scales for pain, anxiety, relaxation, and muscle tension were collected for both groups, within 10 minutes of beginning a session, and within 10 minutes of completing a session. This data was collected by a nurse, not the massage therapists.

The results were clear, if not surprising.

- Pain: Pain scores for the massage group



went down by 52% after their first session, and by 38% after their second. There was no significant change in the control group.

- Anxiety: Anxiety scores decreased by 58% after the first session for the massage group, and by 40% after the second session. There was no significant change in the control group.
- Relaxation: Relaxation scores for the massage group increased by 45% and then 23%. The control group had a significant improvement after the first session, but not after the second session.
- Muscular tension: Muscular tension scores fell by 54%, and then by 44%, compared to no significant change in the control group.
- Other measures: Both groups had improvements with overall satisfaction with their experience, although the massage group had a bigger response to this question. And both groups saw changes in blood pressure, heart rate, and respiratory rate, but the difference between the groups was not significant.

In addition to gathering data from the patients, the researchers also spoke to the massage therapists, nurses, and physiotherapists involved in post-surgical patient care at the facility. The program found widespread acceptance from the hospital staff. The nurses found it easy to incorporate short sessions into patients' daily routines, and the patients seemed excited to receive the work and were less anxious, and more relaxed. And physiotherapists were very enthusiastic, eventually providing many more referrals for massage therapy.

The upshot is that this study, among several others listed in its references, provides evidence that it is feasible to institute a massage therapy program into a busy cardiovascular surgery center. They found it was a safe, effective, and well-received way to help drop anxiety and pain levels for patients undergoing a very stressful event.

My follow-up questions: I would love to see a study like this also gather information on duration of effect—how long after the session did the patients feel relief of pain and anxiety? And did this have any impact on medication use and/or length

of hospital stay? These are questions that can address cost-effectiveness: the kind of information that is often the most compelling to administrators and policy-makers.

What are your follow-up questions?

Next, let's look at how massage therapists who work in hospitals define their roles:

Kania-Richmond et al. The professional role of massage therapists in patient care in Canadian urban hospitals—a mixed methods study. BMC Complementary and Alternative Medicine (2015) 15:20 DOI 10.1186/s12906-015-0536-4. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4355003/>.

In this article Dr. Kania and her team investigate how massage therapists view their professional role in urban hospitals across Canada, with an eye for how this intervention can be successfully integrated into more settings.

They observed that research about hospital-based massage to date has focused mainly on safety and feasibility, but that no one had yet focused on what the professional role of massage therapists in this setting might involve. The goal of this project was to gather quantitative data about settings where massage therapy is used, and qualitative data from massage therapists about their experiences (this is why this is called a "mixed methods" study).

They identified 16 hospitals (out of a total of 305) that hired licensed massage therapists, and 15 of those facilities returned surveys about their massage therapy programs. Most of these (9) were affiliated with a University. Eight of them offered focused care for specific populations (i.e., pediatrics, rehabilitation, etc.), and the rest were non-specific. They ranged in size from 13 to 2424 beds. Fourteen of them were public hospitals, and one was private. Five hospitals also provided other integrative health options, including chiropractic, acupuncture, art and music therapy, and others.

The researchers conducted semi-structured in depth interviews with 25 massage

therapists from 12 of the 15 hospitals that were included. These interviews were then analyzed and put through qualitative research analysis processes that are too complex to go into here. The researchers found several repeating themes about how massage therapists view their roles in hospital settings:

- Health care provider (identified in all 12 represented settings): The massage therapists reported that they were expected to have expert knowledge of their specific techniques or modalities, including how to modify them to provide safe interventions. Their responsibilities included assessing patients, creating treatment plans, formally and informally reporting on their work and observations, and knowing how special needs within population groups might affect their capacity to receive massage therapy.
- Team member (10 of 12 settings): Massage therapists who saw themselves as team members were expected to document their session notes in the same records as the other providers, they had access to patient information, they were an active part of team meetings, and they got referrals from other clinicians.
- Program/clinic support (9 of 12 settings): Some massage therapists had helped to build and implement the massage therapy service offered where they worked. This included working with billing, scheduling, overseeing caseloads, liaising with supervisors, and marketing the program. Other forms of program and clinic support took place when massage therapists worked with other providers to create patient wellness programs and to implement other plans to improve patient care.
- Educator (9 of 12 settings): This heading has some overlap with others, but it encompasses formal and informal interactions with staff and patients about massage therapy, and clarification of misperceptions about the profession. Some MTs also taught exercises, self-massage, and infant massage to some of their patients.
- Promoter of the massage therapy profession (7 settings): While this has some overlap with the educator role,



therapists in 7 of the hospitals reported that they saw themselves representing the profession through their work, with a mind toward creating opportunities for future massage therapists.

- Researcher (2 settings): A small number of massage therapists were recruited to help with research projects at their facilities. These individuals were not professional researchers leading their own projects, however.

This compilation of how licensed massage therapists see their work in urban hospital settings offers some insight into what a hospital based massage therapy program might look like, with options to emphasize various aspects of the roles described. A person interested in creating a new program can use this information to anticipate how massage therapists might fit into an urban hospital setting.

My follow-up questions: Did the researchers also gather input from other health care providers about how they see massage therapists in a hospital setting? (It turns out they did, and this was published elsewhere.) I'm also interested in how the massage therapists were paid for their work—was that from the patient or their family, or was it built into their hospital expenses? The solution to this problem can be an important factor in the sustainability of a program.

What are your follow-up questions?

Now we'll take a brief look at the creation of a hospital-based massage therapy educational program at the Mayo Clinic in Minnesota. Anyone interested in creating a program in this field will do well to look at this one:

Dion L, et al. Development of a hospital-based massage therapy course at an academic medical center. *International Journal of Therapeutic Massage and Bodywork* 2015 Mar 1; 8(1):25-30.

This paper describes the inception of a program to train massage therapists in practical skills to work in hospital settings. It begins with a description of an

inadequate 2-day all lecture program, through the institution of a pilot class, and ends with how the feedback from that program informed the final product.

This program grew from a recognized need for highly-trained massage therapists in acute care settings: patients and staff are enthusiastic about the possibilities, but therapists are often insufficiently prepared.

Some of the holes in the researchers' early training include:

- The ability to work safely in an acute-care medical environment
- Patient documentation and charting
- Navigation of the hospital environment
- The ability to communicate effectively with other health care providers
- Infection control
- And specific skills to adapt techniques and modalities for frail patients
- Self-care skills for body mechanics and accommodating for hospital beds and equipment
- Self-care skills related to the mental and emotional toll of working with very challenged clients, many of whom are in constant pain, or approaching the end of life.

The authors describe the process of creating a program, and how it integrated with the Complementary Integrative Medicine program at the hospital; this is all laid out with a timeline describing the proposal phase, the course set up, launch, and completion.

They also describe how they continued to shape and hone the course based on student feedback, which was generally positive, but which asked for more hands-on time with a massage therapist mentor in the hospital setting.

Interested readers can find a podcast dedicated to this project here: <http://massagetherapyfoundation.org/development-of-a-hospital-based-massage-therapy-course-at-an-academic-medical-center-research-perch/>

I chose these papers specifically to take us through three steps in conceptualizing a hospital-based massage therapy program: the first is one of many studies that demonstrate how hospital-based massage therapy can be done effectively; the second describes some of the tasks and skills that massage therapists must be able to bring to this setting; and the third describes an educational program to help massage therapists prepare for this kind of opportunity. I hope this might spark some interest on your part in joining or creating a hospital-based massage therapy program in your area. Is there something I can do to help? Let me know!



Ruth Werner, BCTMB is an educator, writer, and retired massage therapist with a passionate interest in massage therapy research and the role of bodywork for people who struggle with health. Her groundbreaking textbook, *A Massage Therapist's Guide to Pathology* was first published in 1998, and is now in its 6th edition and used all over the globe. She writes a column for *Massage and Bodywork* magazine, serves on several national and international volunteer committees, and teaches national and international continuing education workshops in research and pathology. Ruth was honored with the AMTA Council of Schools Teacher of the Year Award for 2005. She was also proud to serve as President of the Massage Therapy Foundation from 2010-2014, and she retains a seat as an MTF Trustee.

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