

The Use of an Informational Video to Improve Patient Satisfaction, Preparedness, Mood, and Empowerment

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Background: Massage therapy is commonly used in Canada for the treatment of a wide range of health concerns. Massage therapy is changing to meet the health care needs of Canadians. Rapid changes to the profession may create a gap between patient expectations of massage therapy treatment based on historic views of the profession and their experience in today's practice. This gap could lead to patient confusion, dissatisfaction, or other negative outcomes.

Purpose: This study sought to understand whether patient satisfaction, preparedness, mood, and patient empowerment are improved when new patients who attend a student massage therapy clinic watch an informational video, compared to those who receive the standard paper information sheet.

Participants: The study used a convenience sample of new patients who presented for their first massage therapy appointment to the Humber College Student Massage Therapy Clinic. Participants were randomized either to the intervention group (video and paper information) or the comparison group (paper information only). The outcomes of interest in this study were patient preparedness, satisfaction, mood, and empowerment. Data were collected using two questionnaires, one before treatment and one after.

Results: A total of 108 patients participated in the study (55 comparison group; 53 intervention group). Demographic and clinical characteristics were comparable between the two groups. A statistically significant difference was seen between the two groups when comparing their responses to the pre-appointment statement: "I know what will happen in my initial massage therapy appointment" ($p < .001$). There was no statistically significant difference seen when comparing the responses of the related post-appointment statement ($p = .63$).

Conclusion: This study found that an informational video improved perceived knowledge as patients entered the massage therapy treatment, but did not have a significant effect on satisfaction, mood, or patient empowerment. Other student clinics should consider the addition of an

informational video to their procedures to increase patient knowledge of what to expect.

KEY WORDS: students; education; patient satisfaction

INTRODUCTION

Massage therapy is a commonly used health care modality in Canada for the treatment of a wide range of health concerns, with over 12,000 Registered Massage Therapists in Ontario alone.⁽¹⁾ Like many health care professions, massage therapy is changing to meet the health care needs of Canadians. These changes are reflected in the recent development of the *Inter-jurisdictional Practice Competencies and Performance Indicators* and a national organization responsible for programmatic accreditation to increase the standards of massage therapy education across Canada.^(2,3) The profession's transformation includes an increased focus on evidence-informed and outcome-based practice that has the potential to revolutionize the way massage therapy is taught and clinically applied.^(4,5)

In Ontario, the pace of change described above may be further accelerated by an increasing number of community college massage therapy education programs in addition to historical private career college programs. These changes to the massage therapy profession in Ontario have the potential to create a widening gap between patient expectations of massage therapy treatment based on historic views of the profession and today's practice. This gap could lead to patient confusion, dissatisfaction, or other negative outcomes, particularly for those who have limited knowledge of the profession, such as patients experiencing massage therapy for the first time.

In a teaching clinic, this gap may be further exacerbated by student massage therapists' (SMTs) focus on the assessment and treatment planning components as part of a learning environment, particularly during an initial assessment. Anecdotal reports suggest that some student clinic patients experience a disconnection between their expectations of massage therapy and their experiences, leading to complaints

and expressed dissatisfaction concerning decreased hands-on treatment time.

Discord between patient expectation and experience can negatively influence clinical outcomes and treatment satisfaction for massage therapy.⁽⁶⁾ Patient expectations of treatment success have been shown to influence treatment outcomes for manual therapies, including massage therapy.^(7,8,9,10) Further, treatment anxiety, caused by fear or unfamiliarity with health care treatment, has often been found to lead to negative health outcomes for other health care treatments and interventions.^(11,12) In these cases, the reduction of anxiety and increased patient knowledge of their treatment were shown to improve the patient health care provider relationship and improve treatment outcomes. Patient satisfaction has also been linked to patient knowledge and the congruency between expectation and experience of health care treatment.^(13,14)

Patient education can be addressed through many communication modalities. The use of video to describe and demonstrate an unfamiliar health care treatment has been employed successfully by other professions to decrease patient state anxiety and improve patient outcomes.^(11,13,15,16) In these studies, patients were provided educational videos that described and demonstrated the treatment experience for lung surgery, cancer surgeries, colonoscopy, and transforaminal epidural blocks. Patient outcomes and satisfaction were improved compared to standard care. The degree to which the patient understood and was prepared for their treatment also changed the nature of the patient health care provider relationship, as those receiving the intervention were more likely to ask questions or be more actively involved in their own care. These results lead to the hypothesis that patient preparedness relates positively to patient empowerment through decreased perceived knowledge imbalance in the patient health care provider relationship and decreased anxiety.

While these studies, and others found in the literature, are quite different in treatment modality from massage therapy, they suggest that audiovisual educational tools provide patients with a better sense of preparation and comprehension than verbal or written content, and that their use before treatment can lead to decreased anxiety, improved patient-clinician interaction, and increased patient satisfaction. Video demonstration of treatment helps patients form a clear and accurate set of expectations regarding their upcoming experience. While patients' anxiety before an intervention is likely to vary in its specifics, depending on the individual and the treatment, the removal of concerns relating to the unknown can likely be applied to all new health care intervention experiences. The above also suggests that there is a connection between knowledge, patient satisfaction, and empowerment; increased patient satisfaction and empowerment could be achieved through increasing their knowledge and by the degree to which the

patient's experience aligns with what they are expecting for their treatment.

This study sought to understand whether patient satisfaction, preparedness, mood, and patient empowerment are improved when new patients who attend a student massage therapy clinic watch an informational video, compared to those who receive the standard paper information sheet.

METHODS

This study used a randomized comparison trial design in which patients were randomized either to the intervention group (video information in addition to paper information) or the comparison (paper information) group.

Population and Sampling

The population was a convenience sample of new patients who presented for their first massage therapy appointment to the Humber College Student Massage Therapy Clinic. Individuals were excluded from the study if they had attended the Student Massage Therapy Clinic before. However, individuals were included if they had attended a registered massage therapist outside of the student clinic. It was thought that, due to the diversity of approaches to treatment and the rapid change in education over the past twenty years, patients who had visited a massage therapist might have different expectations relating to the recent changes in the profession. Massage therapists and massage therapy students were also excluded due to their difference in knowledge of the profession from the general patient population of the Student Massage Therapy Clinic.

Randomization

Randomization was achieved by randomly selecting clinic days that received the intervention or comparison. A random number generator was used to assign numbers to each day the student clinic was open during the time of the study. The median number generated was then used to divide the days into two equal groups of intervention or treatment assignment. The rationale for this method was to reduce the possibility of people in the comparison group seeing the video while in the waiting area before treatment. Once the days for the intervention and comparison were chosen, all of the people who qualified, given the inclusion and exclusion criteria, on that day were enrolled in that arm of the study.

Comparison Group

Each participant in the comparison group was given 10 minutes to review the paper information

about what to expect in their initial massage therapy appointment. The paper information was introduced to the clinic two years prior to this study. It consists of one page and eight points that begin with “I understand”. The statements cover the nature and purpose of the massage therapy profession and the student clinic. It also covers policies on commonly asked questions, such as who supervises the students, whether a patient can request a particular student therapist, whether SMTs accept tips, and the fact that private health information is kept confidential. Finally, contact information for the program coordinator is provided. Following the time given to review the paper information, participants were given time to ask questions of the research assistant who administered the paper information sheet. Participants completed the initial questionnaire prior to being greeted by their SMT. Following the initial appointment, participants completed the follow-up questionnaire.

Intervention Group

Each participant in the intervention group was given 10 minutes to review the paper information and watch a short (~ 3 min) informational video about what to expect in their initial massage therapy appointment. The informational video showed interactions the patient could expect and was an audio-visual representation of the paper information sheet. The video was approximately three minutes long and followed the information outlined in the paper information. The only difference between the paper information and the video, other than the medium, was that the video was positioned with ‘you’ statements and the paper information was written with ‘I’ statements. The video was recorded in the student clinic, so that patients could imagine exactly what to expect during their first appointment. Students, graduates, and a faculty member acted out the various roles. The video had a voice-over that read the policies related to the image shown. Similar to the comparison group, these participants were given time to ask questions of the research assistant, to complete the initial questionnaire prior to being greeted by their SMT, and to complete the follow-up questionnaire after their initial appointment.

Data Collection

The outcomes of interest in this study were patient preparedness, satisfaction, mood, and empowerment. Data were collected using two questionnaires. The pre-appointment questionnaire consisted of four questions (I know what will happen, I feel prepared, I feel anxious, I feel positive). For each question, data were collected using a seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). In addition to the outcome related data, demographic information was collected from the participants

regarding their age, gender, highest level of education, previous massage therapy treatment experience, if their treatment goal was relaxation, and if they had paid the student treatment rate.

The post-appointment questionnaire consisted of 16 questions. Two of the questions were paired with the pre-appointment questionnaire (My appointment met my expectations, I feel positive). Some of the questions related to empowerment (I felt comfortable asking questions, I felt my questions were valued). Some of the questions related to satisfaction (I am satisfied, I will return, I would recommend). Again, data were collected from each question using a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

Data were collected using paper questionnaires, which were then manually entered into an Excel spreadsheet and checked by the research team.

Data Analysis

The Excel spreadsheet was uploaded to the Statistical Package for the Social Science (SPSS) for analysis purposes. Descriptive statistics were calculated, including measures of central tendency and variance. Frequency analyses were conducted for discrete variables. Inferential statistics, including paired and unpaired *t* tests, were used to determine if any statistically significant differences existed within and between groups, respectively.

RESULTS

A total of 108 patients participated in the study (58 female and 50 male). Fifty-five participants were randomly assigned to the comparison group and 53 to the video intervention group. Demographic and clinical characteristics (age, gender, education level, student price paid, having previously experienced massage therapy, or having a treatment goal of relaxation) were comparable between the two groups. The demographic and clinical characteristics of participants are shown in Table 1. Similarly, no differences were seen between groups for student massage therapists’ characteristics. The student massage therapists in the intervention group were 69.8% female and 49.1% were second-year students (as opposed to third-year students). The student massage therapists in the comparison group were 74.5% female and 61.8% were second-year students.

For most statements, there was no statistically significant difference between groups. However, some differences were seen with regard to the questions regarding appointment expectations. A statistically significant difference was seen between the two groups when comparing their responses to the pre-appointment statement, “I know what will happen in my initial massage therapy appointment” ($p < .001$).

TABLE 1. Demographic and Clinical Characteristics of Participants

| | <i>Intervention Group</i> | <i>Comparison Group</i> |
|---|---------------------------|-------------------------|
| Number of patients (% of total participants) | 53 (49.1%) | 55 (50.9%) |
| Age | 28.9±11.5 | 28.9±11.7 |
| Gender (Female) (% of group) | 30 (56.6%) | 28 (50.9%) |
| Highest education level achieved (% of group) | | |
| High School | 12 (22.6%) | 16 (29.1%) |
| College | 11 (20.7%) | 19 (34.5%) |
| Some University | 10 (18.9%) | 5 (9.1%) |
| Bachelor's Degree | 14 (26.4%) | 11 (20.0%) |
| Master's Degree | 5 (9.4%) | 2 (3.6%) |
| Doctoral Degree | 0 | 1 (1.8%) |
| Other | 0 | 1 (1.8%) |
| Have previous massage therapy experience (% of group) | 32 (60.4%) | 32 (58.2%) |
| Treatment goal of relaxation (% of group) | 16 (30.2%) | 21 (38.2%) |
| Student price paid (% of total participants) | 44 (40.7%) | 49 (45.4%) |

There was no statistically significant difference seen when comparing the responses of the related post-appointment statement ($p = .63$). A change score was calculated by subtracting the pre-appointment score from the post-appointment score. An unpaired t test was then used to determine if there was a significant difference between the change scores. A statistically significant difference was seen ($p < .001$) (see Tables 2 and 3).

DISCUSSION

The results of this study suggest that the use of an informational video to prepare patients for first time massage therapy treatment by student massage therapists increases their sense of knowing what will occur during their appointment when compared to the comparison of paper information alone. This could be due to the video more clearly demonstrating what occurs during a first session through its detailed visual and auditory presentation of session components, such as a health history interview and assessment. Improved preparation was expected to decrease the difference between patients' expectations of treatment and their experience, which was noted by the results. However, other outcomes expected to be affected by this increased knowledge did not show significant differences between the video group and the comparison group.

Patients in the intervention group reported being more knowledgeable about the content of their upcoming massage therapy appointment than the comparison group ($p < .001$). This result is comparable to other studies investigating knowledge improvement and retention provided by informational health care videos.^(11,13,16) This suggests that video should be considered as a potential tool with which to provide comprehensive information about treatments and may be better suited to knowledge transfer than written text alone, most especially for new patients or those who have limited experience with the treatment they are to receive, such as massage therapy.

Other studies on the effects of informational videos for health care topics have found that this medium improves comprehension and satisfaction when compared to text alone.^(14,16,17,18) The impetus to change procedure to include an informational video is often driven by the desire to improve patient satisfaction.

TABLE 2. Results Pre-treatment Questions 2-4 and Post-treatment Questions 2-16

| <i>Pre-treatment Questions</i> | <i>Intervention Group Mean</i> | <i>Comparison Group Mean</i> | <i>p</i> |
|--|--------------------------------|------------------------------|----------|
| 2: "I feel ready for my initial massage therapy appointment." | 6.34±1.06 | 6.05±0.981 | 0.132 |
| 3: "I feel anxious about my massage therapy treatment." | 3.25±1.86 | 2.93±1.92 | 0.385 |
| 4: "I feel positive about the massage therapy appointment I am about to have." | 6.09±1.04 | 6.09±0.948 | 0.986 |
| <i>Post-treatment Questions</i> | | | |
| 2: "I felt comfortable asking my student massage therapist question about my massage therapy appointment." | 6.64±0.558 | 6.71±0.497 | 0.507 |
| 3: "I felt my questions were valued by my student massage therapist." | 6.75±0.477 | 6.65±0.598 | 0.297 |
| 4: "I feel positive about the massage therapy appointment I just experienced." | 6.51±1.07 | 6.56±0.714 | 0.756 |
| 5: "I am satisfied with the initial massage therapy appointment I just experienced." | 6.43±1.01 | 6.47±0.858 | 0.830 |
| 6: "My Student Massage Therapist explained the reason(s) for any assessments conducted." | 6.75±0.477 | 6.67±0.695 | 0.478 |
| 7: "My SMT explains things in a way that is easy for me to understand." | 6.74±0.655 | 6.73±0.525 | 0.940 |

TABLE 3. Results Pre-treatment and Post-treatment Question 1

| Question | Intervention Group Mean | Comparison Group Mean | p |
|--|-------------------------|-----------------------|-------|
| Pre-treatment question 1: "I know what will happen in my initial massage therapy appointment." | 5.85±1.31 | 4.76±1.36 | <.001 |
| Post-treatment question 1: "My initial massage therapy appointment met my expectations." | 6.19±1.19 | 6.29±0.975 | =.626 |
| Change Score (Post-treatment question 1 – Pre-treatment question 1) | 0.340±1.70 | 1.53±1.56 | <.001 |

The results of this study found no improvement in satisfaction or difference between groups ($p = .83$). Regardless of group, patients were very satisfied with their treatment, with a mean score of 6.43 ± 1.01 for the intervention group and 6.47 ± 0.86 for the comparison group on a seven-point Likert scale. The high degree of satisfaction noted may not allow for an intervention effect to be noticeable. This is similar to other studies where satisfaction measures were high in both the comparison and intervention group, leading to a non-statistically significant improvement for the intervention group.⁽¹⁹⁾ Many studies of massage therapy as an intervention, that measured satisfaction as an outcome, have found patients rate satisfaction highly for the treatment of a wide variety of health concerns and symptoms when provided by a non-student clinician.^(20,21,22,23) This suggests that the high measure of satisfaction found could, in part, reflect the background high degree of satisfaction generally reported for massage therapy treatment, respecting the potential difference between student massage therapy treatment and that of a non-student clinician. Further, while no directly comparable objective data are available from previous clinic semesters, the degree of satisfaction, as judged by a lack of any patient complaints during the study, may have contributed to by the Hawthorn effect.⁽²⁴⁾ The Hawthorn effect would suggest that, by participating in the study, members of the comparison group may take additional care to review the written information about the massage therapy treatment than typical new patients. This attention to the written information may have had a comparable effect to the video regarding knowledge of clinic policy and procedure, leading to a similar level of satisfaction.

Previous studies have found that the expectations of treatment efficacy for massage therapy treatment influence treatment outcomes.^(7,8,9,10) While this study did not directly investigate treatment outcomes, satisfaction for treatment could be seen as an analogue for treatment success. No significant difference in satisfaction was recorded in this study. Given that

expectations of efficacy were not measured in this study and that previous studies suggest the patients generally have a high expectation of efficacy, it could be expected that patients from both groups expected their treatment to be successful to a similar degree, creating a similar degree of positive influence on satisfaction between both groups. This feature could help to explain the high degree of satisfaction found regardless of intervention group.

Mood, particularly anxiety, was not found to be affected by the addition of the video. All patients indicated a very low level of anxiety and felt very positive about their treatment. Much of the benefits described in other studies on the effects of an informational video are related to reduction of anxiety for health care procedures that are invasive or painful.^(11,13,16) While it was hypothesized that patients about to receive massage therapy treatment were not likely to be as anxious as the patient groups previously studied, it was expected that patients having their first session from a SMT could be anxious to some degree due to the novelty of the experience, the requirement to disrobe, the sharing of health information, the presence of pain, or other factors. This patient group's lack of anxiety and high level of positivity could mask the effect of the video. Massage therapy, in this setting, may also be less anxiety-provoking due to a number of factors such as the reason for seeking care, the acuity of the patients health concerns, and the perceived likelihood of treatment related pain or discomfort. About 34% of both video and comparison groups were seeking care for relaxation, suggesting the possibility of generalized anxiety. However, this did not relate to anxiety about treatment.

Generally, massage therapists are favourably viewed by the public.⁽²⁵⁾ This positive view of the profession, and of massage therapy treatment itself, could be reflected in the high degree of positivity indicated by both study groups. This suggests that this view is extended to SMTs and their treatment work. This high degree of positivity may again mask any difference between groups.

Patient empowerment has been shown to be improved when informational videos are used to better prepare the patient for health care treatment.⁽¹¹⁾ Patients who are better informed about their health care treatment are less at a disadvantage compared to their health care provider, leading to a decreased power differential in their relationship. In this study, both the video and comparison patient groups indicated a high degree of comfort asking questions of their SMT, suggesting a lack of power difference. This may reflect how massage therapists are perceived hierarchically or their position as student practitioners. It is possible that students would not be seen as having the same degree of subject matter expertise, leading to a decreased sense of knowledge disparity between patient and therapist.

The applicability of this study's results to general massage therapy practice is limited by the study

practitioners being students and the specificity of the video content to this student clinic. The video was developed based on the policies and procedures of this environment and may be dissimilar to other clinics, practitioners' workplace or clinical practices. Further, the relationship between SMT and patient may not reflect that of an experienced practitioner. The student clinic environment may also not attract patients with the same types of health concerns as other practices. More research is needed to investigate the applicability of these results to other massage therapy environments.

There are many avenues for future research related to this topic. Given the high satisfaction, positivity, and low anxiety in this studies' patient group, other patient groups that more closely reflect those studied for other health care interventions could provide different results. The use of video may be more effective for those patients who are more anxious about treatment. Different clinic or treatment environments could yield more information on the applicability of the results to massage therapy treatment generally. Further, this study could be replicated in a non-student practitioner environment. Lastly, objective measures of knowledge improvement and retention, or other variables, could be used in addition to patient perception.

CONCLUSION

This study found that the use of an informational video improved new patient perceived knowledge, but did not have a significant effect on satisfaction, mood, or patient empowerment. No patient complaints were received during the study, suggesting that clearly communicating clinic policy, procedure, and initial treatment contents leads to improved satisfaction regardless of the media type used. Other student clinics should consider the addition of an informational video to their procedures.

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CONFLICT OF INTEREST NOTIFICATION

The authors declare there are no conflicts of interest.

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REFERENCES

1. College of Massage Therapists of Ontario. 2013 Annual Report. Toronto, ON; 2014. Available from: <http://www.cmto.com/cmto-wordpress/assets/CMTO-Annual-Report-2013.pdf> Accessed July 17, 2014.
2. College of Massage Therapists of Ontario. Inter-jurisdictional Practice Competencies and Performance Indicators for Massage Therapists at Entry-to-Practice. Toronto, ON; 2012. Available from: <http://www.cmto.com/cmto-wordpress/assets/Inter-Jurisdictional-Competency-Standards-June-2012.pdf> Accessed July 17, 2014.
3. National Accreditation Planning Committee (2013). A Plan to Establish a Canadian Accreditation Process for Massage Therapy Education Programs. Available from: http://www.cmtea.ca/wp-content/uploads/2014/01/MTCA_FinalReport.pdf Accessed July 17, 2014.
4. Andrade CK. *Outcome-based Massage: From Evidence to Practice*, 3rd edition. Baltimore, MD: Lippincott Williams & Wilkins; 2014.
5. Dryden T, Moyer C. *Massage Therapy: Integrating Research and Practice*. Champaign, IL: Human Kinetics; 2012.
6. George SZ, Robinson ME. Preference, expectation, and satisfaction in a clinical trial of behavioral interventions for acute and sub-acute low back pain. *J Pain*. 2010;11(11):1074–1082.
7. Bishop MD, Mintken P, Bialosky JE, Cleland JA. Patient expectations of benefit from interventions for neck pain and resulting influence on outcomes. *J Ortho Sport Phys Ther*. 2013;43(7):457–465.
8. Bishop MD, Bialosky JE, Cleland JA. Patient expectations of benefit from common interventions for low back pain and effects on outcome: secondary analysis of a clinical trial of manual therapy interventions. *J Man Manip Ther*. 2011;19(1):20–25.
9. Myers SS, Phillips RS, Davis RB, Cherkin DC, Legedza A, Kaptchuk TJ, et al. Patient expectations as predictors of outcome in patients with acute low back pain. *J Gen Intern Med*. 2008;23(2):148–153.
10. Kalauokalani D, Cherkin DC, Sherman KJ, Koepsell TD, Deyo RA. Lessons from a trial of acupuncture and massage for low back pain: patient expectations and treatment effects. *Spine*. 2001;26(13):1418–1424.
11. Arabul M, Kandemir A, Çelik M, Alper E, Akpınar Z, Aslan F, et al. Impact of an information video before colonoscopy on patient satisfaction and anxiety. *Turkish J Gastroenterol*. 2012;23(5):523–529.
12. Kwon YE, Kim BH. The effects of video-audio information provision on physical discomfort, anxiety, and nursing satisfaction of the clients for gastroscopy. *Korean J Adult Nurs*. 2013;25(2):231–239.
13. Crabtree TD, Puri V, Bell JM, Bontumasi N, Patterson GA, Kreisel D, et al. Outcomes and perception of lung surgery with implementation of a patient video education module: a prospective cohort study. *J Am Coll Surg*. 2012;214(5):816–821.
14. Wu KL, Chen SR, Ko WC, Kuo SY, Chen PL, Su HF, et al. The effectiveness of an accessibility-enhanced multimedia informational educational programme in reducing anxiety and increasing satisfaction of patients undergoing cardiac catheterisation. *J Clin Nurs*. 2013;23(13-14):2063–2073.

15. Kakinuma A, Nagatani H, Otake H, Mizuno J, Nakata Y. The effects of short interactive animation video information on pre-anesthetic anxiety, knowledge, and interview time: a randomized controlled trial. *Anesth Analg*. 2011;112(6):1314–1318.
16. Kim SH, Koh WU, Rhim JH, Karm MH, Yu HS, Lee BY, et al. Preconsent video-assisted instruction improves the comprehension and satisfaction in elderly patient visiting pain clinic. *Korean J Pain*. 2012;25(4):254–257.
17. Lapane KL, Goldman RE, Guillian BJ, Hume AL, Eaton CB. Tailored DVDs: a novel strategy for educating racially and ethnically diverse older adults about their medicines. *Int J Med Inform*. 2012;81(12):852–860.
18. Rovell KM, Bradle JB, Kruesi K. Implementation of targeted medication education for improved patient satisfaction. *J Obstet Gynecol Neonatal Nurs*. 2012;41(S1):S156–S157.
19. Cutshall SM, Wentworth LJ, Engen D, Sundt TM, Kelly RF, Bauer BA. Effect of massage therapy on pain, anxiety, and tension in cardiac surgical patients: a pilot study. *Complement Ther Clin Pract*. 2010;16(2):92–95.
20. Braun LA, Stanguts C, Casanelia L, Spitzer O, Paul E, Vardaxis NJ, et al. Massage therapy for cardiac surgery patients—a randomized trial. *J Thorac Cardiovasc Surg*. 2012;144(6):1453–1459.
21. Mortazavi SH, Khaki S, Moradi R, Heidari K, Vasegh Rahimpour SF. Effects of massage therapy and presence of attendant on pain, anxiety and satisfaction during labor. *Arch Gynecol Obstet*. 2012;286(1):19–23.
22. Dryden T, Baskwill A, Preyde M. Massage therapy for the orthopaedic patient: a review. *Orthop Nurs*. 2004;23(5):327–32.
23. Wentworth LJ, Briese LJ, Timimi FK, Sanvick CL, Bartel DC, Cutshall SM, et al. Massage therapy reduces tension, anxiety, and pain in patients awaiting invasive cardiovascular procedures. *Prog Cardiovasc Nurs*. 2009;24(4):155–161.
24. Portney LG, Watkins MP. *Foundations of Clinical Research: Applications to Practice*, 3rd edition. Upper Saddle River, NJ: Pearson; 2009.
25. College of Massage Therapists of Ontario. *Results of the 2010 Credibility Survey*. Toronto, ON; 2011. Available from: <http://www.cmto.com/2011/09/2233/> Accessed July 17, 2014.

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