



MASSAGE THERAPY

Principles and Practice



SEVENTH EDITION
7th

Susan G. Salvo

Massage Therapy Principles and Practice

7th Edition

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Dedication

This book is, once again, dedicated to a special person in my life.

To Michael Breaux—my childhood friend, domestic partner, business partner, study partner, proofreader, collaborator, father of my children, travel companion, chef extraordinaire, and real-life superhero.

We've laughed, cried, and dreamed together. We've shared the highs and lows of marriage, business, and parenting, as well as supported each other through the joys and sorrows of life. With you by my side, good times are twice as good and hard times are half as bad.

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SUSAN SALVO



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Preface

As the practice of massage evolves, so must this textbook. *Massage Therapy Principles and Practice*, the seventh edition, continues with its focus on evidence-informed practice and citations of scholarly sources, while maintaining the textbook's characteristic intuitive organization, readability, and respect for tradition. This textbook simplifies difficult concepts, is packed with meaningful and vibrant images, detailed illustrations, and has a commonsense approach, all of which enhance learning.

With the widening range of massage practices across the globe, massage practitioners are in high demand, particularly those cross-trained to work in a variety of settings, including spas, health clubs, hospitals, oncology wards, physical therapy, and chiropractic clinics. As author, my goal is to focus on key concepts required to achieve massage licensure, which forms the foundation of a massage practice in all these settings.

Organization

The book covers important subjects of massage practice required in curricula and programs approved by the Commission on Massage Therapy Accreditation (COMTA) and content areas outlined in professional standards-setting documents such as the Core: Entry

Level Analysis Project (ELAP) and the Massage Therapy Body of Knowledge (MTBOK). This prepares students for successful passing of the Massage and Bodywork Licensing Exam or MBLEx. Each chapter begins with learning objectives that correspond with its chapter headings. Key concepts are bolded, helping students identify and learn vocabulary terms and their definitions. Concepts are presented from simple-to-complex to help students build or scaffold knowledge, which promotes academic success. Even though the information used by massage practitioners is rapidly expanding, we are committed to keeping the content manageable, relevant, and well organized.

The textbook has two units and 30 chapters.

- [Unit One](#) contains 17 chapters and focuses on foundational subjects such as history, ethics, boundaries, research, evidence-based practice standards and treatment planning, body mechanics, draping, self-care, infection control, and massage techniques, as well as essential skills of clinical hydrotherapy and spa methods, complementary and integrative methods such as reflexology, seated massage, Asian bodywork, clinical applications, and business practices. Also included in [Unit One](#) is how to adapt massage for special populations such as pregnant and frail elderly clients, and clients in hospice care.
- [Unit Two](#) contains 13 chapters and provides the essentials of anatomy, physiology, kinesiology, and pathology with an emphasis on treatment planning for these conditions and safe practice procedures. Also included are massage modifications for medical treatments such as dialysis and conditions such as musculoskeletal injuries.

New for seventh edition

New Assessments in every chapter—Along with the tried-and-true activities designed for application of knowledge in real-

world scenarios, each chapter now has a multiple-choice question section to help vocabulary building and critical thinking.

More Emphasis on Evidence-Informed Practice—

This is a central focus of massage education and enhances the safety and efficacy of the profession. Two chapters are devoted to this. [Chapter 5](#) teaches students how to develop a clinical question and how to search for, evaluate, and apply evidence when formulating treatment plans. [Chapter 6](#) features a review of massage research by body system and populations, and includes over 80 new studies, which adds to our body of knowledge. [Chapter 6](#) also has the new educational directives for massage schools from the Massage Therapy Foundation.

Evidence-based Approaches to Body Mechanics and Endangerment Sites—[Chapters 7](#) and [8](#) discuss these topics and integrate evidence from research studies to enhance the safety and practice of massage therapy.

Updated Protocols for Infection Control and Disinfection

—[Chapter 9](#) includes the most up-to-date procedures from the CDC for safe practice including disinfecting of office surfaces, massage tools, and laundry.

Empathy-based Ethics—This edition features an expanded discussion of cultural competency, how to develop and express empathy when communicating with clients and colleagues in cross-cultural work settings, recommendations for a LGBTQ+ inclusive practice, and decision-making approach that can be used to manage mild, moderate, and severe ethical dilemmas.

New Kinesiology Images—This edition features new action-oriented illustrations of body movements, origins, and insertions to help students accurately identify, locate, palpate, and treat muscles.

Expanded Clinical Massage, Sports Massage, and Hospital-Based Massage Sections—This chapter expounds on the current pain and biopsychosocial models with special emphasis on pain management. Michele Renee and I collaborated to create a user-

friendly list of orthopedic assessments (complete with statistics) and guidance on how to use muscle energy techniques, proprioceptive neuromuscular facilitation, positional release, strain/counterstrain, manual lymphatic drainage, myofascial release, instrument-assisted soft tissue mobilization, cupping, and taping. Also included in this chapter is how to modify the massage for soft tissue injury during the acute phase and post-surgery considerations. The chapter is jam-packed with knowledge and skills massage practitioners need when working in rehabilitation or sports clinics, physician-referred practices, or multidisciplinary clinics.

Spa Procedures—As requested, spa procedures are back in [Chapter 12](#) and include protocols for body wraps, body scrubs, floatation tanks, hot stone massage, and more.

Special Populations—[Chapter 11](#) now includes expanded sections regarding quality-of-life assessments, working with clients who have disabilities or impairments, and mandatory reporting requirements. This chapter also includes the most updated information for use of essential oils, hydrotherapy, and CBD products during pregnancy.

Distinctive features

Terms and Their Meanings—These tables help students learn word origins used in science and medicine. This knowledge improves comprehension as well as test scores.

Biographies—Biographical profiles and candid interviews provide a real-world perspective from the most-respected authorities and pioneers in massage and pain management. This edition adds the biography of researcher Niki Munk.

Activities and Assessments—Robust activities and assessments such as matching questions, multiple choice questions mentioned previously, case studies, and discussion questions are provided to promote critical thinking, encourage dialogue, foster open-mindedness, and enhance cultural competencies.

Evolve Online Resources—The text includes an extensive collection of online resources, available at <http://evolve.elsevier.com/Salvo/MassageTherapy>. Students have access to educational activities, flash cards, videos to demonstrate massage techniques, routines, procedures, and client intake interviews, as well as photo galleries, audio glossaries, downloadable forms, and a practice test with over 600 questions.

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[FIG. 1.6](#) John Harvey Kellogg (1852 to 1943) promoted massage to the general public by writing articles and books, publishing a magazine, and directing the Battle Creek Sanitarium, which provided massage as part of the health regimen for its patrons.

[FIG. 1.7](#) Ida Rolf (1896 to 1972), founder of structural integration or Rolfing, was one of the many scholars who taught at the Esalen Institute.

[FIG. 2.1](#) Professional relationships: key principles of respect, authenticity, empathy, trust, and confidentiality.

[FIG. 2.2](#) Model of cultural competency. This diagram outlines five

milestones toward cultural competency based on the work of Campinha-Bacote (2002).

FIG. 2.3 If you take a break from the massage and remain in the room while the client is crying, it may be appropriate to rest a hand on the client's shoulder as a gesture of empathy.

FIG. 2.4 Friendships versus professional relationships. Note reciprocity is part of friendships, but not part of professional relationships.

FIG. 3.1 Portable massage table with features of height, length, frame, width, padding, and fabric labeled.

FIG. 3.2 Bolsters placed on a supine-lying client (A) and prone-lying client (B). Note the use of a face rest and arm shelf in B and that the table and all table accessories are draped

FIG. 3.3 Practitioner sitting in a stool to massage a supine-lying client's foot.

FIG. 3.4 Some massage lubricant choices. From left to right, they are butter, crème, gel, and oil.

FIG. 4.1 Six dimensions of wellness.

FIG. 4.2 Healthy Eating Plate developed by Harvard School of Public Health. This helps individuals make healthy eating choices and includes an icon for physical activity.

FIG. 4.3 Massage practitioner receiving massage as self-care to relieve stress.

FIG. 5.1 Evidence-informed practice. All three elements are important and needed to support an evidence-informed massage practice.

FIG. 5.2 The interrelationship between practitioners and clients/patients. Each group is involved as new knowledge is developed and old knowledge is tested and authenticated or invalidated.

FIG. 5.3 Hierarchy of evidence. The strongest evidence is near the peak, and the weakest evidence near the wide base. Note the top is blank to indicate there is no perfect level of evidence.

FIG. 5.4 The research process. This is used to conduct investigations and pursue knowledge within a field.

FIG. 6.1 Summary of the Massage Therapy Foundation's research agenda.

FIG. 6.2 Measuring massage-associated changes in muscle electrical activity during a research investigation using electromyography.

FIG. 6.3 Measuring massage-associated changes in balance and posture control during a research investigation.

FIG. 6.4 Measuring massage-associated changes in blood pressure, respiration rate, and heart rate during a research investigation.

FIG. 6.5 Measuring massage-associated surface temperature and blood flow changes during a research investigation using infrared thermography.

FIG. 7.1 Foot stances provide the practitioner's base of support with three points of contact with the ground on each foot. (A) Triangular-shaped base of support created by three points of contact on one foot.

(B) Three bony points of contact include the calcaneal tuberosity (1); head of first metatarsal (2); and head of fifth metatarsal (3).

FIG. 7.2 Practitioner in the archer stance. Feet in the archer stance are pointing in different directions with one foot pointing in the direction of movement (*lead foot*) and the other foot pointing beneath the massage table (*trailing foot*). (A) Lateral view. (B) Posterior view. (C) Posterior view without the massage table.

FIG. 7.3 Practitioner in the horse stance. Feet in the horse stance are pointing in the same direction, usually beneath the massage table. (A) Posterolateral view. (B) Lateral view. (C) Anterior view without the massage table.

FIG. 7.4 Relationships between table height, gravity (*green arrow*), and practitioner use of body weight during compression (*purple arrow*) during massage with client laying on (A) a high-height massage table, (B) a medium-height massage table, and (C) a lower-height massage table. Note that the lower-height massage table

allows efficient use of

gravity and body weight when applying compression.

FIG. 7.5 Compression force through the hand should be transmitted via the radiocarpal joint primarily through the radius to take advantage of its wide distal end. This force then crosses the elbow and is directed toward the shoulder.

FIG. 7.6 Maintain wrists and finger joints as vertically as possible. If needed, brace the thumb behind a closed fist for joint stability.

FIG. 7.7 A minimum of 15 minutes is recommended between clients so massage practitioners can rest, stretch, mentally “let go” of the previous client, and be ready for the next one.

FIG. 7.8 Prone-lying client using a face rest, an arm shelf, and a bolster placed in front of the ankles.

FIG. 7.9 Prone-lying client moving the face rest frame into a comfortable position before the practitioner locks the cams into place. **FIG. 7.10** Prone-lying client with cushions placed above and below the breasts with face rest frame adjusted above the level of the massage table.

FIG. 7.11 Supine-lying client using a bolster placed behind the knees and a rolled-up towel placed beneath the cervical spine.

FIG. 7.12 Practitioner rolling up bath-size towel for use as a cervical pillow. Note the 1-inch gap down the center of the towel, which will provide a space for the cervical spinous processes. The thicker sides of the rolled towel provide support for muscles in the lamina grooves of the cervical spine.

FIG. 7.13 Client in a semireclining position using a specially designed table.

FIG. 7.14 Client in a semireclining position using a wedge-shaped bolster.

FIG. 7.15 Client in a side-lying position with pillows placed beneath the head, the upper extremity, and the lower extremity.

FIG. 7.16 Client in a seated position using (A) a massage chair; (B) a sturdy four-legged chair with elbows resting on the thighs; (C) a table

for upper body support.

FIG. 7.17 Client turning from a supine position to a prone position while the practitioner lifts the sheet to form a tent. Note that the client's arms are beneath the top sheet and the feet are uncovered as they may become entangled in the sheet while the client is turning. **FIG. 7.18** Side-lying sheet draping. (A) Client with back exposed while a folded towel secures the sheet. (B) Practitioner massaging client's back while sitting on a stool. (C) Client's upper extremity resting on the pillow with the sheet tucked beneath the treatment area. (D) Right lower extremity resting on the table with the sheet tucked beneath the nearby pillow. (E) Left lower extremity resting on the pillow with the sheet tucked beneath the thigh.

FIG. 7.19 Supine-lying client with two towels; one towel covers the client's torso and one towel covers the client's pelvis and lower extremities.

FIG. 7.20 Accessing the abdomen. (A) A folded towel is used to cover the chest area during abdominal massage. (B) After abdominal massage, recover the abdomen by holding the top edge of the towel with one hand and pulling the bottom edge of the towel with the other hand. Continue pulling the towel until it is unfolded.

FIG. 7.21 After the client has turned from prone to supine or supine to prone, position the towel so it covers the client's pelvis and lower extremities.

FIG. 8.1 Endangerment site: anterior and posterior cervical triangles within the anterior neck.

FIG. 8.2 (A-E) Physical forces and their relationship to massage techniques. (A) Compression and effleurage. (B) Tension and stretching. (C) Bending and skin rolling petrissage. (D) Shearing and skin rolling petrissage. (E) Torsion and ocean wave petrissage.

FIG. 8.3 One-hand effleurage. The knuckles of one hand are used to apply pressure to the upper trapezius.

FIG. 8.4 One-hand effleurage. An open hand is used to apply pressure

to the lateral thigh while the opposite hand anchors the ankle to the massage table.

FIG. 8.5 One-hand effleurage. The hands are stacked to increase pressure while one hand is in contact with the skin.

FIG. 8.6 One-hand effleurage. The forearm near one hand can be used to apply pressure on the back.

FIG. 8.7 One-hand effleurage. The knuckles of one hand can be used to apply pressure to the hamstrings while the other hand simultaneously lengthens the muscle by passively extending the knee.

FIG. 8.8 Two-hand effleurage. Two hands move simultaneously to apply pressure to the back. (A) Hands start at the top of the shoulders and move down the back. (B) Hands move down the back to the base of the spine. (C) Hands move up the sides of the back. (D) Hands return to their original position at the top of the shoulders.

FIG. 8.9 Two-hand effleurage. Two hands move simultaneously to apply pressure to the anterior thigh. Keep thumbs and fingers together during technique application, if possible.

FIG. 8.10 Alternate hand effleurage. Two hands alternating to apply pressure on the calf. Keep thumbs and fingers together during technique application, if possible.

FIG. 8.11 Alternate hand effleurage. Two thumbs (A) and two fingertips alternating (B) to apply pressure over the paraspinal muscles.

FIG. 8.12 Alternate hand effleurage. Two hands alternating to apply circular pressure on the abdomen.

FIG. 8.13 Nerve stroke. One or two hands used to apply light pressure down the lower extremity.

FIG. 8.14 One-hand petrissage. One hand is used to compress, lift, and release tissues of the posterior arm.

FIG. 8.15 One-hand petrissage. Fingers and thumb of one hand are used to compress, lift, and release the upper trapezius.

FIG. 8.16 Two-hand petrissage. Two hands are used to compress, lift,

and release tissues on the posterior leg or calf.

FIG. 8.17 Two-hand petrissage. Two hands are used to compress, lift, and release tissues on the anterior thigh. The hands move in opposite directions.

FIG. 8.18 Two-hand petrissage. Two hands are used to compress, lift, and release tissues on the anterior thigh. The hands move in opposite directions.

FIG. 8.19 Skin rolling petrissage. Skin is compressed and lifted between two fingers and thumbs, then moved or rolled across adjacent areas.

FIG. 8.20 Skin rolling petrissage. Skin is compressed and lifted between the fingers of one hand and the thumb web of the other hand, then repeated in adjacent areas.

FIG. 8.21 Alternate hand petrissage. Two hands are alternating to apply compression, lifting, and releasing movements on the lateral aspect of the back.

FIG. 8.22 Superficial warming friction. Two hands move rapidly over the skin to generate warmth.

FIG. 8.23 Superficial warming friction. The knuckles of one hand are used to apply pressure on the pectoralis major muscle below the clavicle (A). The fingertips of two hands are used to apply pressure up and down the paraspinal muscles (B).

FIG. 8.24 Superficial warming friction. The ulnar surface of one hand is used to apply pressure along the medial border of the scapula.

FIG. 8.25 Rolling friction. Two hands are used to apply rolling friction on the forearm.

FIG. 8.26 Wringing friction. Two hands are used to apply wringing friction on the forearm.

FIG. 8.27 Transverse friction. The thumb of one hand is used to apply transverse friction on the forearm.

FIG. 8.28 Transverse friction. Fingertips of two hands are used to apply transverse friction over the paraspinal muscles.