



Complimentary and Integrative Therapies. AOCNP Review 2024

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Learning Objectives

- Discuss the common terms in complimentary and integrative medicine.
- Discuss the integrative medicine modalities used in cancer care.
- Explore evidence to support integrative medicine modalities.
- Understand certification and licensure related to integrative medicine
- Understand future implications for APRNs.

Complementary and Integrative Medicine

- 30% of adults, 12% of children use unconventional approaches
- 40% of American believe cancer can be cured with alternative therapies- (American Society of Clinical Oncology, 2018)
- Less than half of oncologists discuss CIM use with patients (Karim et al, 2021)
- Only a small number of doctors initiate discussion of CIM with their patients.
- 14% of Americans tell their doctors about the use of unconventional approaches (J. Vogel et al, 2022)
- Importance of clarifying misconceptions.
- Alternative/functional/complementary/naturopathic/integrative therapies.
- Continuous research and emerging guidelines.

Table 6-9. National Center for Complementary and Integrative Health Definitions.

Modality	Definition	Example
Integrative	Medical system based on coordinated use of conventional and complementary medicine, patient-centered care, and health promotion using a holistic approach to wellness, including emotional, mental, functional, spiritual, and psychosocial.	Program to promote wellness and relief of symptoms for people with cancer.
Functional	Medical systems model based on biology to identify the root cause of illness and not the condition.	Treatment of inflammation.
Complementary	Non-mainstream practice used to complement conventional medicine.	Dietary supplements other than vitamins, minerals, and herbs.
Naturopathic	Medical system that uses a combination of traditional practices and healthcare approaches popular in Europe during the 19th century.	Diet or lifestyle modifications, manipulation therapies, stress reduction, homeopathy.
Alternative	Non-mainstream practice used in place of conventional medicine; unproven, unsafe, and expensive.	Manipulation therapy used alone to cure cancer.

Integrative Oncology

- Integrative oncology is an essential component of cancer care focused on evidence-based modalities and therapies, such as acupuncture or dietary modifications, in conjunction with conventional medicine using an interprofessional approach (Ben-Arye et al., 2021).
- As a discipline, integrative oncology seeks to blend conventional and complementary care, with the goals of increasing the efficacy of conventional cancer treatment programs, reducing symptoms, and improving quality of life for patients with cancer.

Table 6-10. Types of Complementary and Integrative Medicine

Type	Description	Example
Complementary and Integrative medicine systems	Have a philosophy, explanation of diseases, diagnosis, and therapy	Folk medicine, Ayurveda, homeopathy, naturopathy, traditional Chinese medicine
Mind–body based	Based on the theory that physical health is affected by emotional and mental wellness	Spiritual practices; yoga; cognitive behavioral therapy; meditation; art, dance, and music therapy; biofeedback; guided imagery
Biology based	Focus on practice to improve health	Dietary practices, chelation, botanicals, natural products, nonvitamin and nonmineral dietary supplements
Manipulative, body based	Modalities used to treat a variety of conditions	Cupping, chiropractic, massage, scraping, reflexology
Energy based	Movement of energy in and around the body for balance to influence wellness	Qigong, Reiki, magnet therapy, acupuncture, acupressure, sound, light, therapeutic touch.

Clinical Trials in CIM

- Lag in Clinical trials
- RCTs lack methodological rigor, usually small sample sizes.
- Inadequate control conditions.
- Knowledge gap- low acceptance, implementation.
- Application of CIM to cancer is limited.
- Society of Integrative Oncology (SIO)- bridging the gap in CIM research.

Regulating and Monitoring CIM

- Safety and efficacy of some therapies are unknown
- Dietary Supplement Health Education Act 1994.
- Oversight provided by the Food and Drug Administration (FDA).
- A dietary supplement-taken by mouth and contains a dietary ingredient.
- Intent to supplement the diet.
- Forms-tablets, capsules, soft gels, gel caps, liquids, powders, bars.
- Cannot claim to diagnose, prevent, treat or cure a specific disease
- Categorized as food not a drug
- FDA cannot regulate a supplement prior to marketing.
- Manufacturers are responsible to ensure safety.
- National Institutes of Health-Office of Dietary Supplements

MedWatch

- FDA 's safety information and adverse event reporting program.
- Important and timely product information on prescription, OTC drugs, biologics, medical devices, nutritional products.
- Healthcare professionals and consumers can report problems-FDA regulated products.
- Number of annual recalls are on the rise- 24 in 2012- (US. FDA, 2022)
- Undeclared ingredients, health problems due to use, bacterial contamination, package/label.

Table 6-11. Strength of Evidence of Common Complementary Treatments.

Problem	Modality	Strength of Evidence/Grade	Special Consideration
Pain related to cancer/cancer treatment	Mind-body (MBSR), massage (B/C) acupuncture (C), music (C), art therapy (C), exercise (C)	B/C	Safety, efficacy
Insomnia	CBT (C), Yoga C, Tia-chi,	C	CBT- gold standard
Chemo induced nausea and vomiting	Acupressure (B), electroacupuncture (B), ginger, relaxation (C)	B,C	
Hot flashes	Acupuncture, hypnosis, yoga	C	
Anxiety	Massage, relaxation, music therapy (B), meditation (A), acupuncture (C, yoga (B), stress management (B)		
Fatigue	Exercise (B), CBT with hypnosis C, acupuncture (C, yoga (C,		

Table 6-11. Strength of Evidence for Common Complementary Treatments

Problem	Modality	Strength of Evidence/Grade	Special Considerations
Hot flashes	Acupuncture, hypnosis, yoga	C	
Depression/mood disorders	Meditation (A), mindfulness-based relaxation (A), yoga, massage, exercise, relaxation (B)	A,B	
Neuropathy	Acupuncture, Massage	I	
Oral mucositis	Oral glutamine	I	
Body Image	exercise	B	

Guiding Principles and Model Guidelines

- **National Guidelines:**
- The White House Commision on Complementary and Alternative Medicine Policy (WHCCAMP) guiding principles, The US. Department of Health and Human Services (2002) and the Institute of Medicine model guidelines (Bondurant et. Al., 2005).
- Framework for CIM- national level.
- No revision in more than 10 years.

Framework for CIM in the National Level (WHCCAMP)

- Use science to generate evidence that protects and promotes public health.
- Deliver high-quality health care for the whole person.
- Support the right of patients to choose freely among safe and effective approaches and qualified practitioners.
- Promote partnerships and teamwork in integrated health care among patients, healthcare providers, and researchers committed to creating healing environments and respecting diversity of healthcare traditions.
- Disseminate comprehensive, timely evidence about CIM systems, practices, and products.
- Obtain input from informed consumers for incorporation in proposing priorities for health care, research, and policy decisions.

Model Guidelines: Use of Complementary and Alternative Therapies in Medical Practice

- Affirm duty to do no harm.
- Patient evaluation.
- Treatment planning.
- Consultation and/or referral to licensed or state-regulated providers.
- Medical records documentation.
- Education.
- Selling of health-related products, and conformance to ethical standards when conducting clinical investigations.

Academic Initiatives

- The Academic Consortium for Integrative Medicine and Health.
- 60 academic medical centers/affiliates in US and Canada.
- Advance Integrative health- developing curricular, supporting research, informing healthcare policy.
- Collaboration between integrative medicine programs and cancer centers- enhance patient care through integrative oncology research.

Professional Societies

- The Society of Integrative Oncology (SIO).
- Integrate CIM practice, education and research into cancer care.
- Mission: promote and advance evidence-based integrative care to improve lives of people affected by cancer (SIO).
- Publishes guidelines on use of CIM in breast cancer, lung cancer, pain management.
- Nurses: The American Holistic Nurses Association published statement on role of nurses in CIM.
- Provides guidance and competency expectations for nurses of all levels of practice.



Complementary and Integrative Medicine in Cancer Treatment


- CIM use is common in all areas of oncology care.
 - Prevention, symptom management, treatment, palliative care, end-of-life care.
 - Efficacy or safety-based of research.
 - Most CIM in cancer care need more research.
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Table 6-12. Examples of Possible Evidence-Based Complementary and Integrative Medicine Modalities for Common Cancer-Related Symptoms


Symptom/Condition	National Center for Complementary and Integrative health	Natural Medicines
Anxiety	Transcendental meditation, chamomile capsules, acupuncture for post-traumatic stress, self-hypnosis, omega-3	Possible: tryptophan, St. John’s wort, S-adenosyl-L-methionine
Pain	Acupuncture, spinal manipulation, massage	Camphor, capsicum, acupuncture, balneotherapy.
Constipation	Flaxseed, flaxseed oil, aloe vera	Psyllium, magnesium, cascara, glycerol, senna
Depression	St. John’s wort for mild depression, S-adenosyl-L-methionine, yoga	St. John's wort for mild depression, S-adenosyl-L-methionine, yoga
Diarrhea	Probiotics, stress management techniques (cognitive behavioral therapy, exercise), acupuncture, peppermint oil	Lactobacillus, zinc, Bifidobacterium, psyllium
Fatigue	yoga	Magnesium
Nausea or vomiting	Ginger	Acupuncture, ginger

Complementary and Integrative Therapy Practice

- **Licensure:**
 - Laws that regulate an occupation.
 - Protect by preventing unqualified practitioners from practicing.
 - Scope of practice- delineates specific responsibilities that form practice.
 - Occurs at state level and scope of practice may differ in different states.
- **Credentialing:**
 - Certification- process of awarding acknowledgements to a practitioner for meeting predetermined qualifications.
 - National certification- professional's credentials are recognized in all states and scope of practice is the same across states.



Certification and Reimbursement

- American Holistic Nurses Credentialing Corporation (www.ahncc.org) is the only nursing body that offers an inclusive CIM certification.
 - Nurses can obtain separate training in reiki, aromatherapy, or homeopathy, and can then bill for these services separately.
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Core Competencies for CIM Practice

- Expand baseline knowledge.
- Provide high-quality education regarding safety and efficacy.
- Facilitate partnerships between patients, healthcare providers, and CIM providers.
- Seek proper training and credentials if practicing a CIM therapy.
- Require informed consent if delivering a CIM therapy.
- Guarantee credentialing of a provider if referring a patient.
- Establish standards of practice for the use of CIM within specified patient groups.
- Document consent procedures and response to therapy.
- Assist in the design or maintenance of any preexisting integrated program.
- Develop a working knowledge of cost issues and reimbursement.
- Assist in the design of methodologically sound, rigorous research.
- Contribute to the body of knowledge through publications and presentations.

Table 6-13. Examples of Complementary and Alternative Medicine Practices with Educational Preparation, Licensure, and Credentialing Criteria.

Practice	Acronym	Certification or Licensing Body	Educational preparation	Related Links
Acupuncture	LAc (Licensed acupuncturist)	National Certification Commission for Acupuncture and Oriental Medicine	NCCAOM-nationally recognized. Certification required for licensure.	NCCAOM: www.nccaom.org
Ayurveda	BAMS, DAMs (Bachelor/Doctor of in Ayurvedic medicine)	No formal licensure or certification in the US.	Several states in US approved Ayurvedic schools-500 hrs of clinical practice.	National Ayurvedic Medical Association: www.ayurvedanama.org
Chiropractic medicine	DC (Doctor of Chiropractic)	Licensure in 50 states and in Washington, D.C. National board examination. Practitioners are required to pass a series of four national board exams and be state licensed.	Curriculum includes a minimum of 4,200 hours of classroom, laboratory, and clinical experience.	American Chiropractic Association: www.acatoday.org

Implications for APNs

- Knowledge expansion
- Integrative assessment
- Advising patients across the cancer spectrum
 - Referrals
 - Integrative care plans
 - Interactions-drug/herbals/treatments
 - Proper documentation
- Spiritual distress
 - Can be detrimental to health if not addressed
 - Assess (Faith Importance and Influence, Community, Address (FICA) Spiritual History tool.

Case Study

- Ms. B is a 49-year-old woman with history of Type 2 Diabetes Mellitus, and lower back pain with diagnosis of left breast invasive ductal carcinoma Stage IA, ER PR positive
- She is status post total left mastectomy and reconstruction 2 years ago and is currently on tamoxifen
- Patient presented to integrative medicine with complaints of hot flashes, she is currently on venlafaxine for this but continues to have hot flashes almost every hour

Case Study.

Which of the following recommendation would be the most appropriate for Ms. B?

- 1) Recommend soy isoflavones for hot flashes
- 2) Continue with venlafaxine and add acupuncture treatment
- 3) Discontinue venlafaxine and start acupuncture
- 4) Answer 1 and 3 are correct

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