

KEYWORDS Clinical aromatherapy Clinical management Best practice model History Theoretic frameworks Plant sources Safety case reports Pathologic response **KEY POINTS** Aromatherapy is an alternative medicine or integrative therapy that works with conventional medicine treatment. Aromatherapy emerged and was embraced as an alternative medicine for many medical a Mayo Clinic Hospital, Apheresis Department, 5777E Mayo Boulevard, Phoenix, AZ 85054, USA; b Austin Peay State University, School of Nursing, McCord Building, Clarksville, TN 37043, USA * Corresponding author. German Hieronymus Braunschweig surgeon and botanist, wrote a book on distillation of oils from plants that included 25 oils France In 1919, Gattefosse¹, a famous chemist, was burned in an explosion in his laboratory. The wounds became infected. Wound rinsing with essential oil eradicated the infection. He coined the term, aromatherapy, and was known for the medical use of essential oils with their antibacterial and healing properties of essential oils. The National Institutes of Health National Center for Complementary and Integrative Health developed categories for these therapies--mind-body therapy, biologically based practices, manipulative and body-based practices, energy medicine, and whole medical systems, such as Ayurvedic medicine and traditional Chinese medicine.^{3,4} Nursing health care aromatherapy falls into the category of mind-body therapy. Clinical aromatherapy can be beneficial for symptom management for pain, nausea, vomiting, preoperative anxiety, critical care, well-being, anxiety, depression, stress, insomnia, respiratory, dementia, and oncology. E-mail address: farrarf@apsu.edu Nurs Clin N Am 55 (2020) 489–504 <https://doi.org/10.1016/j.cnur.2020.06.015> nursing.theclinics.com 0029-6465/20/Published by Elsevier Inc. The US Consumer Product Safety Commission (CPSC) monitors unsafe products.¹¹ The CPSC enforces federal laws to protect consumers against unreasonable injury and death from products.¹² The following are examples of how these 2 federal organizations monitor essential oils. Essential oils come from seeds, stems, leaves, needles, petals, flowers, rinds and fruits, woods and resins, roots and rhizomes, and grasses. Westerners found many alternative methods to treat medical conditions, such as pain, anxiety, depression, and insomnia, with scented oils from various plant sources. The pendulum began to swing from Western medication to an Eastern holistic approach. Table 1 summarizes major historical timelines of countries and cultural influences, validating aromatherapy as medical, clinical, and holistic. **REGULATION GUIDELINES FOR ESSENTIAL OILS** The Food and Drug Administration (FDA) of the United States guidelines classify essential oils for aromatherapy as cosmetics, because they are not drugs for treating or prevention of a disease.¹⁰ Therefore, aromatherapy essential oils are not regulated by the FDA. Imbalance have illness Acupuncture, cupping, herbal teas, powders from plants, meditation, and herbal burning near skin Greece Theophrastus inherited the botanic garden from Aristotle. He wrote a book about specific uses and formulas for aromatics. Case reports are presented for considerations regarding flammability, elder and child safety, dermatitis, phototoxicity, oral toxicity, and eye safety, including critical analysis and intervention. Aromatherapy regulation of guidelines, plant sources for aromatic oils, and safe use of essential oils in symptom management in clinical aromatherapy is reviewed. According to the National Institutes of Health National Center for Complementary and Integrative Health, Americans

spend more than \$30.2 billion annually on this therapy.¹ It is predicted the global market will grow in spending to \$5 trillion by 2050.² Aromatherapy also is called integrative medicine.³ It is especially important for frontline nurses to understand the difference between alternative therapy and integrative therapy. The outcome from the administration of essential oil can be measured with a pre-anxiety level and post level of anxiety to determine if the essential oil is effective.^{4,5}

WORLDWIDE HISTORICAL EVOLUTION OF AROMATHERAPY

Aromatherapy has been used for thousands of years. NURSING THEORISTS SUPPORT FOR HEALTH CARE AROMATHERAPY

Historical evolution of medical, clinical, and holistic uses of essential oils is embraced by 8 major nursing theorists. Their theoretic frameworks and concepts reflect the use of clinical aromatherapy as a patient-centered and holistic approach for balancing physical health, spiritual needs and well-being. Need to regain balance by internal purifications followed by special diet, herbal remedies, massage therapy, yoga, and meditation

China
Shen Nung's manuscript listed 350 plants in 2800 BC. The Food and Drug Administration of the United States guidelines classify essential oils as cosmetics because they are not drugs for treating or prevention of disease. Sadly, over time, opioids and anti-anxiety medications were abused, with the result of these medications purchased from drug dealers, overdosing, and death. Nursing health care uses essential oils to complement therapeutic interventions, decrease anxiety. Essential oils leaders emerged, supporting aromatherapy as a credible therapy for mind, body, and spirit.

Arabia
Ibn Sina, an Arabic physician, used aromatics, such as saffron, camphor, and cloves, for medical treatment. It was common for pain to be treated with various levels of opioids and receiving prescriptions for medications with each physician visit. Yoga, Pilates, mindfulness meditation, acupuncture, and scented oils were used with massage. In alternative medicine, the therapy works as an addition to conventional medical treatment, whereas integrative therapy is solo and replaces any conventional medical care.

Historical evolution	Country	Cultural Therapy
Egyptian culture	Resins, balms, and fragrant oils	

Papyrus Ebers wrote a famous manuscript about aromatic medicine. The first private apothecary shop opened in Baghdad, with dispensing medicines, such as tinctures, suppositories, inhalants, and pills. It is expected that the plant-based essential oil applications can be measured, such as a pre-anxiety symptoms, interventions with essential oil, and post-anxiety symptoms. Hippocrates, father of modern medicine, advocated the use of aromatherapy due to his belief that aromatic baths and scented massage were key to good health. The 8 theorists' embracement confirms health care aromatherapy is a credible alternative method (Table 2). Kyphi formula contained 16 plants and was used for sleep and anxiety, to soothe skin, and as an antidote for snake bite. He became the father of botany. Credibility is seen in the historical evolution and nursing theorist support.

INTRODUCTION

The Western perspective on health care has been focused on medications for treatment of health care conditions. Suggestions are recommended for a best practice model for clinical aromatherapy.

CLINICAL AROMATHERAPY

Aromatherapy is a fast-growing complementary therapy worldwide.

Iraq
A skeleton was found 30,000 years ago with concentration of extracted plant essential oils. Traditional Chinese medicine Based on harmony energy of yin-yang
Opposite balance is key to health. The federal government and states stepped in, passing laws monitoring

prescriptions written for opioids; therefore, a search for alternative medicine began. This article investigates the use of clinical aromatherapy. India

The Ayurveda natural system of medicine was based on disease due to an imbalance of stress in a person's consciousness. Pedanius Dioscorides wrote *De Materia Medica* covering 700 plants, including aromatics. Rose or orange blossom was used as a flavor to medicine. This led to the manufacturing of medicine. Jean Valnet, an army physician, wrote the first aromatherapy book by a doctor. Alternative methods were found in the Eastern perspective on health care. This is believed to be around 2800 BC. Indians shamans are known as perfumers, from scents of plants. Hippocrates wrote about aromatic baths and antibacterial properties and urged people to carry aromatic plants for protection. Inhaled henbane was used as an anesthetic. Topical sugar was used to stop bleeding. 490 Farrar & Farrar

conditions. Ayurvedic physicians are called holymen. Chinese culture still embraces herbal medicine. Pre-Christian era emerged with the belief that essential oils were pagan. In response, Pope Gregory the Great passed a law banning all aromatics. Works of Galen and Hippocrates were smuggled to Syria for safekeeping. Medical aromatherapy emerged in the third century. Shirley Price authored *Aromatherapy for Healthcare Professionals*. She is known for clinical use of essential oils.