# **Essential Oil Education for Health Care Providers**

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#### **Abstract**

**Context:** Patients' use of complementary and integrative health practices has been increasing in the United States for a variety of reasons. The use of essential oils is one complementary and integrative health modality that continues to increase in popularity. Many providers are not knowledgeable about and are not comfortable discussing the topic with their patients.

**Objective:** The research team intended to evaluate the effectiveness of the dissemination of current information on essential oils to health care practitioners through a continuing education module.

**Design:** The research team developed and implemented the module in collaboration with the American Association of Nurse Practitioners Continuing Education (AANP CE) Center.

**Setting:** The continuing education module was made available on the AANP CE Center's Web site to allow the voluntary participation of nurse practitioners throughout the nation at their convenience. The module was available to other interested practitioners as well.

**Participants:** Participants were 231 health care practitioners, 62.5% of whom were nurse practitioners in family practice.

**Intervention:** The education module included information on 5 commonly used essential oils,

indications for use in patient populations, and safety and contraindications for use.

**Outcome Measures:** Pretest and posttest measures of participants' knowledge of essential oils and an evaluation by participants of the educational module were used to evaluate its effectiveness. Data were collected from the Web site during a 3-mo period, for the months of June, July, and August 2015.

Results: An increase in the correct responses at posttest, when compared with the pretest, demonstrated that learning had occurred because of the module. Upon completion of the module, most participants reported that they felt more comfortable discussing integrative health modalities and essential oils with their patients. Most participants also reported that they intended to ask their patients about their use of integrative health practices because of their experiences with the continuing education module.

**Conclusions:** The overall results demonstrated a positive effect on participants, showing their increased knowledge of essential oil indications, safety, and contraindications, as evidenced by the posttest and evaluation results.

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Corresponding author: Heidi Saarinen, APRN, CNP, DNP E-mail address: Heidi.Saarinen@ndsu.edu Increased exposure to other cultures, as well as unlimited access to the Internet, have made information regarding integrative health more easily obtainable. Many patients perceive integrative health practices as easier to understand and as natural and, therefore, safer than conventional medicine.

Providing comprehensive, holistic, and individualized care is a common goal of many health care professionals nationwide. In the United States, the growing popularity of complementary and integrative health modalities among patients has led to a demand for providers to consider the use of a more integrative approach to medicine, increase

their knowledge of complementary and alternative medicine, and obtain skills that would allow them to counsel patients who choose.

Despite popular use, formal education and training on the use of complementary and integrative health modalities, and specifically on the use of essential oils, are not typically a large component of the curriculum in nursing or medical schools in the United States. Many providers are not knowledgeable and are not comfortable discussing the topic with their patients.<sup>3,4</sup>

The use of essential oils is one integrative health modality that has been increasing in popularity. In 2011, the global market for essential oil fragrances and flavors was estimated at \$24 billion, growing annually at a rate of 10%. The United States is the largest importer and consumer of essential oils, using 40% of the total production. Because no current guidelines are available to assist providers in deciding when the incorporation of essential oils into a health care regimen may or may not be appropriate, some providers may choose to avoid having conversations with their patients regarding the use of essential oils. Enhancing providers' knowledge of essential oils may help facilitate communication among patients and providers and enhance delivery of comprehensive, holistic care.

The research team developed and implemented a continuing education module on essential oils in collaboration with the American Association of Nurse Practitioners Continuing Education (AANP CE) Center. In its study, the team intended to evaluate the effectiveness of the dissemination of current information on essential oils to health care practitioners through that module.

#### Methods

### **Participants**

The continuing education module was made available on the AANP CE Center's Web site to allow the voluntary participation of nurse practitioners throughout the nation at their own convenience. The module was available free of charge to both AANP members and nonmembers. The target audience included any nurse practitioner wanting to enhance his or her knowledge of integrative health and essential oils.

#### **Procedures**

Based on the need for enhanced knowledge of integrative health and essential oils, the authors created and implemented a continuing education module in collaboration with the AANP CE Center. The module consisted of a digital presentation with a voiceover, a video demonstration, and case studies.

The number of research trials with essential oils on human subjects is limited and, therefore, it is difficult to create guidelines for providers to follow when discussing the use of essential oils with a patient. To counsel patients, providers need to take the time to educate themselves on individual essential oils, implications for use, and safety considerations.

To develop the module, the authors examined the available literature on the topic of essential oils. Lavender and peppermint essential oils have the most studies available regarding their use. Lavender is most known for its calming effects and its ability to enhance sleep.<sup>6</sup> It has also been studied for its effects on treatment of minor burns.<sup>7-9</sup>

Peppermint essential oil has been the most studied for its effects on the gastrointestinal system and for relief of symptoms such as nausea, vomiting, and irritable bowel syndrome. Other essential oils have some limited supporting literature, including lemon eucalyptus and melaleuca oils. The most common adverse effects of essential oils consisted of minor skin irritation, drug interactions when ingested, and acute toxicity related to accidental ingestion or overuse.

### **Continuing Education Module**

The module included information on lavender, peppermint, lemon, eucalyptus, and melaleuca essential oils and their indications for use in patient populations, as well as safety considerations regarding their use. The CE module included 4 learning objectives that were intended to enable participants to (1) recognize the factors contributing to patients' desire to incorporate integrative health and essential oils into their health care regimens, (2) identify the 5 commonly used essential oils and their indications for use in patient populations, (3) state safety concerns and possible adverse effects of commonly used essential oils, and (4) report enhanced comfort in practice when discussing integrative health modalities and the use of essential oils with patients.

### **Outcome Measures**

Data reports from the continuing education module were received monthly in aggregate form for the months of June, July, and August 2015 from the AANP CE Center.

The 4 learning objectives correlated with questions that examined the changes in participants' knowledge between a pretest prior to the start of the module and a posttest after completion of it. An increase in correct responses demonstrated that learning had occurred because of the module.

## **Results**

A total of 231 participants received continuing education certificates for completion of the educational module, pretest, posttest, and evaluation questions. Nurse practitioners in family practice had the largest participation rate, with approximately 62.5% of participants working in that field.

Participants scored higher on the posttest for all 4 objectives. More than 74% of participants agreed or strongly agreed with the statement, "Because of the module, I feel more comfortable discussing the use of essential oils with my patients." The high level of agreement after viewing the module indicates that most participants had an enhanced comfort about discussing essential oils as an integrative health modality with patients in their practices. Approximately 67% of participants planned to ask their patients about integrative health and essential oils, and the majority planned to modify their practices or seek more information about the topic.

Participants were also given an opportunity to provide feedback related to the continuing education module. Many participants left comments stating that the continuing education module was good, great, and/or informative. Several negative comments were made related to technological difficulties and delayed ability to download the module. Overall, the evaluation of the dissemination of information through the module indicated positive results and an enhanced awareness of the participants about integrative health and essential oils.

#### Discussion

The continuing education module received positive results and demonstrated that learning had occurred among participants. Because essential oils are widely available on the market and used by a large variety of patients, it could be beneficial for all health care providers who participate in health promotion or who teach patients to complete the continuing education module. Other health care providers could include physicians, physician assistants, nurses, and physical or occupational therapists.

The AANP CE center allows nonnurse practitioners to participate in continuing education activities; however, awareness of the educational opportunity would likely be low because most practitioners seek continuing education credits through their own professional organizations. The module could be made available to online continuing education centers of the other respective organizations.

### **Conclusions**

Both the findings in the literature and the findings for the continuing education module demonstrated a need for nurse practitioners and health care providers to enhance their knowledge about integrative health modalities to serve the patient population better. Therefore, it may be reasonable to recommend that the continuing education module be incorporated as one part of integrative health education into the curriculum for nurse practitioners. Nurse practitioners need additional training on integrative health modalities to guide and educate patients who choose to incorporate alternative therapies into their health care regimens.

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