Best Practice Statement: Use of Alternative Medications and Essential Oils at School

Issue: Increasing numbers of parents are requesting to use herbal remedies, dietary supplements and essential oils prescribed by naturopathic doctors, company sales representatives, chiropractors, and other providers who may or may not be licensed by any regulating board in Alaska. As the use of these items becomes more prevalent, schools need to know how to respond in a safe manner.

Background: The National Center for Complementary and Alternative Medicine (NCCAM) of the National Institutes of Health (NIH) defines complementary and alternative medicine as a group of diverse medical and health care systems, practice and products that are not presently considered to be part of conventional Western medicine.

The use of natural products such as herbs (also known as botanicals), vitamins, minerals, and probiotics has grown considerably in the past few decades. These products are widely marketed, readily available to consumers, and often sold as dietary supplements. Essential oils are fragrant essences found in many plants, each with a different chemical composition that affects how it smells, how it is absorbed and how it is used by the body. Unlike pharmaceutical preparations, dietary supplements and essential oils can be marketed without proven safety or efficacy. A manufacturer does not have to provide the Food and Drug Administration (FDA) with the evidence for safety, purity or effectiveness of the product or report any data on adverse events.

To date, little research has been able to document the safety and effectiveness of these products. While there are indications that some may be helpful, more needs to be learned about the effects and safety of these products on the human body, particularly in children. To be clear, in using the word "research" it is prudent to remember that "research" is not just one single study with an outcome. Research, in order to be valid, must be replicated and must have the same result confirming the outcome. Research is defined as: diligent and systematic inquiry or investigation into a subject in order to discover or revise facts, theories, applications, etc.

NOTE: For all medications administered to clients, nurses are accountable for knowing therapeutic effects, safe dosage, contraindications, and potential side effects as well as following their nursing regulations of their state.

Fact-finding: Alternate Medications/Remedies and Essential Oils

NCCAM: Many complementary and alternative health products and practices are not tested for safety or efficacy, especially in children. It is important to note that children may react differently than adults to these approaches. Some dietary supplements may be of poor quality or contain contaminants, including drugs, chemicals, or metals.

An essential oil that is safe when applied one way may not be safe when used in another way. Some oils are considered safe if inhaled, and yet may be irritating if applied to the skin in concentrations as low as 3-5%. Thyme, oregano, clove, and cinnamon bark essential oils are examples of this. Several of the citrus oils, such as bergamot, lemon, lime, orange, and angelica can cause complications due to phototoxicity (i.e., sun sensitivity) if there is exposure to sunlight or a sunbed following skin application.

The Asthma Allergy Foundation of America organization affirms that perfumes, fragrances, cleaning products and other types of household agents can be composed of hundreds of different allergenic ingredients. Citrus, animal fats and oils, plant extracts and more, make these types of solutions a real problem for people with allergies, or allergic asthma.

The American Academy of Pediatrics (AAP) state in their policy statement, *Guidance for the Administration of Medication in School*, that a lack of safety information for these medications limits their appropriate use at schools and that they should never be administered without a written physician order. The AAP also stresses that because herbal products and dietary supplements are not regulated, there are concerns about purity and potency of the products.

Product quality is influenced by many factors, including which portion of the plant is used (i.e., root, stem, leaves, flowers), the time of harvest (i.e., young versus old plants), the handling of the product and proper identification. Furthermore, labeling is often inaccurate.



The Alaska Nursing Regulations 12 AAC 44.945 (c) A nurse licensed under AS 08.68 may not administer to a patient a nutritional supplement that (1) contains one or more herbs: or (2) was compounded for the patient rather than commercially manufactured...(e) used in this section, (1) "administer" means to provide a nutritional supplement to a patient for ingestion by the patient: (2) "compounded" means the preparation, mixing, assembling, packaging, or labeling of a nutritional supplement; (3) "health care provider" includes a licensed (A) advanced nurse practitioner; (B) doctor of medicine; (C) doctor of osteopathy; (D) physician assistant; and (E) dentist; (4) "herb" means a plant grown for its health or medicinal properties; "herb" includes plant parts and extracts.



Recommendations:

- School district policies and procedures should meet professional standards of practice for safe medication administration and should be followed consistently.
- In compliance with nursing regulations, school nurses should not administer ORAL herbal supplements to students at school.
- School policy should prohibit any school personnel from administering an herbal medication, nutritional supplement or essential oils orally; students should not be allowed to carry them on their person.
- Educate students, parents and school staff about the risks involved in administering products for which no safety parameters have been established, the importance of adequate research to determine the effect of herbals preparations and the rationale for schools to establish guidelines intended to ensure safety of all students.
- Avoid dismissal of complementary or alternative medical treatments in ways that communicate a lack of
 sensitivity or concern for the family's perspective. It is important to support parents in their preferences for
 health care and help them find safe solutions to such dilemmas. Not administering a product in school does not
 prevent parents from administering it at home or coming to school to administer it themselves.

References:

- 1. Schwab, N and Gelfman, M. (2005). *Legal Issues In School Health Services* (p.219-222). Lincoln, NE: Authors Choice Press.
- 2. National Institutes of Health, <u>National Center for Complementary and Alternative Medicine (NCCAM)</u>, http://nccam.nih.gov/
- 3. American Academy of Pediatrics. (2009) <u>Guidance for the Administration of Medication in School</u>, http://pediatrics.aappublications.org/site/aappolicy/index.xhtml
- 4. Kemper KJ, Vohra S, Walls R. The Use of Complementary and Alternative Medicine in Pediatrics. Pediatrics. 2008;122;1374-1386.
- 5. Asthma and Allergy Foundation of America, http://www.aafa.org/
- 6. National Association of School Nurses. (2012) *Medication Administration in the School Setting*, http://www.nasn.org/Portals/0/positions/2012psmedication.pdf.

Further resources:

- Children and Complementary Health Approaches, http://nccam.nih.gov/health/children
- <u>5 Things To Know About Safety of Dietary Supplements for Children and Teens,</u> http://nccam.nih.gov/health/tips/childsupplements
- Offit PA. Do You Believe in Magic? New York: HarperCollins Publishers; 2013.