POSITION STATEMENT: Essential Oils in Healthcare Settings

This position statement was developed by the Standards and Guidelines Committee.
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Publication Date
Original: 2019 November

BACKGROUND

The use of essential oils in various settings is growing, in part due to a move to 'natural' products and increasing marketing of these as substitutes for conventional medicine and vaccines, and as cleaning products. Oils are being applied topically, ingested, and diffused, often without sufficient scientific evidence to support these uses, or consideration of potential toxic effects [1]. While the use of essential oils may have perceived positive effects for an individual, such as a reduction in stress [2], there is currently insufficient scientific evidence or consensus that they are effective to prevent or treat communicable diseases such as influenza, or for use as cleaning products or pesticides/insect repellants, and they should not be promoted as such [3-6].

Studies have shown some essential oils to have antiseptic or antiviral properties (e.g., tea tree oil [7-9], elderberry extract [10], and natural phenols [11]), and while there is some promising research to show that essential oils may assist in illness prevention and treatment [8, 11], inhibit organism growth [7], or help to eliminate biofilms when used in conjunction with traditional antimicrobials [12], the majority of these studies are in vitro [7,11,13]. There are no established standard concentrations of essential oils, and currently insufficient evidence exists to recommend their use in healthcare settings such as hospitals, long-term care homes, and clinical offices (including physiotherapy and massage), residential settings such as retirement homes and group homes, and community settings such as schools and daycares. Some natural products may cause harm to individuals, when used as an adjunct to traditional medicine [14]. In addition, the scents and ingredients of essential oils and products containing these may cause allergic reactions [15-17], sensitization or phototoxic effects [18], and contravene facility "no scent" policies. Health Canada has explicit information regarding the use of essential oils, including that these should not be ingested, should not be applied to more than 10% of body surface area, and should not be used topically undiluted [18].

Organisms have been found to grow in essential oils and equipment used to diffuse these, and improper storage and/or sharing of equipment between individuals have been associated with outbreaks [19].

POSITION STATEMENT

- Essential oils are not a substitute for conventional treatment or vaccines. IPAC Canada recommends following national guidelines for immunization, including annual influenza vaccination.
- Essential oils are not sufficient for cleaning and disinfecting surfaces or reusable items in a healthcare setting. At minimum, environmental surfaces and inanimate items, or non-critical medical devices should be thoroughly cleaned and disinfected with a low-level disinfectant. This low-level disinfectant should have a drug identification number (DIN) from Health Canada, indicating its approval for use in Canadian healthcare settings [20], along with appropriate efficacy and contact time for the intended use, following manufacturer's instructions for use.
- Diffusers/vaporizers should not be used in healthcare settings. If diffusers/vaporizers are used for/by an individual, they should be completely emptied and thoroughly cleaned and disinfected daily and more frequently if necessary, to prevent contamination, biofilm development, and resultant inhalation of any potentially pathogenic organisms [21].

GLOSSARY/DEFINITIONS

As per the Canadian Standard Association (CSA):

- "SHALL" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard;

- "SHOULD" is used to express a recommendation, or that which is advised but not required; and
- "MAY" is used to express an option, or that which is permissible within the limits of the standard, an advisory or optional statement.

Healthcare setting (CSA): "any location where healthcare is provided, including emergency care, prehospital care, hospitals, long-term care, home care, ambulatory care, and facilities and locations in the community where care is provided (e.g., educational institutions, residential facilities, correctional facilities, dental offices, and physician's offices).

Note: Definitions of healthcare settings can overlap, as some settings provide a range of care, such as chronic care or ambulatory care provided in acute care, and complex care provided in long-term care." Clause 1.2 defines healthcare settings as: "including, but not limited to, all acute care hospitals; trauma centres; emergency care facilities; medical clinics with or without overnight stay or observation; endoscopy centres; laser eye clinics; outpatient surgical services; cosmetic surgical offices; dental general and surgical facilities; other office surgical facilities; general physician offices (with and without treatment spaces); stand-alone laboratory facilities; diagnostic imaging centres; nursing homes; long-term care facilities; assisted-living facilities; mental health facilities; forensic facilities; rehabilitation facilities; additional services facilities; chronic care facilities; group homes; hospice care facilities; stand-alone dialysis clinics; ambulatory clinics; walk-in health clinics; physiotherapy clinics; pediatric clinics; public health clinics; adult daycare centres; third-party reprocessors; educational settings; and private entrepreneurs [22]."

STAKEHOLDERS

Healthcare and other workers in acute care facilities, long-term care homes, clinical offices, and communal settings in the community

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