

Herbal smoke, aerosol and cologne may play a role as disinfectant against the COVID-19 battle

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Madam, the spread of coronavirus disease 2019 (COVID-19) and its containment became challenging for people worldwide.¹ With the current spread of its third wave has propelled the significant use of disinfectants like sanitizers and antimicrobial agents for surfaces cleaning to prevent further spread of COVID 19 infection.² There are several commonly used disinfectants available in the market, such as ethanol, isopropyl alcohol and formaldehyde. However, these disinfectants are expensive and may pose significant health risks associated with chemical composition and extensive use.³

To minimize the side effects, we propose three possible methods of disinfection that are cheaper and easily applicable. These are smoke, aerosols and cologne. The smoke method comprises of burning of dry leaves of Hemar, *Laurus nobilis*, *Cedrus* and *Santalum album* for disinfecting the environment and it is a common practice in our part of the world. Aerosols of natural herbal extracts are produced by preparing their mixture with water or alcohol in an enclosed jar under pressure and released as a fine spray by means of a propellant gas. The natural extracts like eucalyptus drops, tea tree oil, cloves oil, butter, rosemary, orange peel, lavender oil, mint, lemon juice, Ola can be mixed with 2 tablespoons of baking soda and water or alcohol to generate green aerosol disinfectants. The third method is a traditional Turkish cologne technique that utilizes mixing of 70-80% of alcohol with extracts of jasmine, tobacco, lavender, amber or white tea and through spray guns or aerosol diffusers can be used to disinfect the environment of homes,

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shopping malls, hospitals, academic fields, offices and schools.⁴

The efficacy of herbs as disinfectants used in smoke/incension, aerosols and cologne can be determined through the laboratory disc diffusion method prior to their expenditure. Thus, improved quality and quantity of commercially available natural green disinfectants and sanitizers which are indigenous, cost-effective and with minimal/ineffective side effects can be introduced for annihilation of COVID 19 spread.⁵

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