

## The effects of aromatherapy essential oil inhalation on BP, PR, serum cortisol in normotensive healthy adults after intensive exposure to white noise and arithmetic subtraction stressor

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The aims of this study were to find the clinical evidence of anti stress effects of aromatherapy essential oils. We conducted to verify the anti stress mechanism and effects of inhalation of essential oils by human laboratory study. The subjects were 95 normotensive healthy adults, 33 in experimental group, 31 in placebo group and 31 in control group. The experimental treatment was to inhale the aromatherapy EO, mixture of Lavender and Ylangylang (1:1 ratio). The placebo treatment was to inhale artificial flavor. To evoke the stress situation, we gave the white noise and subtraction calculation stressor to subjects in laboratory room. After exposure to stressful situation, we gave the experimental treatment, placebo treatment for 10 minutes. And then BP, PR and serum cortisol level were measured to find the acute effects of aromatherapy EO inhalation in post experiment 10 minutes, 30 minutes. After exposure to stressful situation, subjects were increasing the BP, PR, and serum cortisol as a stressor indicator. The aromatherapy EO inhalation was significantly effective to reduce the systole, diastole after 10 minute EO inhalation, and was significantly effective to reduce the systole, serum cortisol after 30 minute EO inhalation. Conclusively, the aromatherapy was effective to modulate to stressful situation.

### Biography

Myung-Haeng Hur has completed his Ph.D. at the age of 40 years from Catholic University. She is the Professor of College of Nursing, Eulji University in South Korea. She is aromatherapist, trained in IFPA. She has published more than 40 papers in reputed journals and has been serving as a reviewer member of Asian Journal of Nursing and Journal of Korean Academy of Nursing.

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