The effects of aroma essential oil inhalation on ANS response and concentration
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This study is an experimental research to examine the effects of aroma essential oil inhalation on ANS response and concentration. The subjects were selected from volunteers aged between 18 and 30 at two universities in K and D cities. The experimental group was treated with aroma essential oil inhalation based on the international aromatherapist’s prescription. 4:1 ratio of lemon and rosemary oil (0.1ml). The placebo group was treated with 0.9% saline solution, and no treatment for control group. Canopy9 Plus 4.0 (IEMBIO Inc., USA) was used to measure autonomic nervous system response. To measure concentration, Trail Making Test and Stroop Color-word Interference Test of Computerized Neurocognitive Function Test were used. The results of the study are as follows: Sympathetic nervous system activities of the experimental group were significantly higher than control group (F=4.316, p=.016). Parasympathetic nervous system activities of the experimental, placebo, and control groups are not different. Autonomic nervous system activities of the experimental, placebo, and control groups are significantly different (F=3.883, p=.024). In Stroop Color-Word Interference Test, Concentration levels of the experimental, placebo, and control groups are significantly different (F=7.397, p=.001). The results of the study indicated that aroma essential oil inhalation activates sympathetic nervous system activity and increases autonomic nervous system response. It was also revealed that concentration level was partially increased. In conclusion, aroma essential oil appropriately activates sympathetic nervous system activity and therefore, can be a nursing intervention in enhancing brain activities.

Biography
Myung-Haeng Hur has completed her PhD from Catholic University. She is a Professor of College of Nursing, Eulji University in South Korea. She is an aromatherapist, trained in IFPA. She has published more than 60 papers in reputed journals and has been serving as a Reviewer Member of Asian Journal of Nursing and Journal of Korean Academy of Nursing. HyoKyeong Kim is a master in Nursing Science. Also she is a RN in Eulji University Hospital.

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