

## The effect of aromatherapy with Rose essential oil in treatment of headache due to Nitroglycerine infusion in patient admitted to cardiac emergency department

Mostafa Setak Berenjestanaki<sup>1</sup>, Hosien Taherian<sup>2</sup>, Ali Sadeghi<sup>3</sup>

1-MSc of Critical Care Nursing, Faculty of Nursing and Midwifery, Mazandaran University of Medical Sciences, Sari, Iran

2-Bachelor of Nursing,, Shahid Chamran Specialized heart hospital, Isfahan University of Medical Sciences, Isfahan, Iran

3-Assistant Professor of Cardiology, Isfahan University of Medical Sciences, Isfahan, Iran

**Introduction:** Most patients receiving Nitroglycerine infusion, experience some degree of headache. This study is conducted to investigate the effect of aromatherapy with Lavender essential oil in treatment of headache due to Nitroglycerine infusion in patient admitted to cardiac emergency department.

**Methods:** This clinical trial was done on 150 patients with informed consent. They were randomly allocated in tree groups of 50 participants (Rose essential oil, Acetaminophen tablet and placebo). In Rose essential oil group, subjects inhaled Rose essential oil and in placebo group, liquid Paraffin in a cotton filled by 3 drops of the product for 30 minute. In the Acetaminophen group, one 325 mg tablet was used. The intensity of headache was measured by visual analogue scale before and, 15, 30 and 60 minutes after intervention. Data analysis was done using Chi-square, Kruskal-Wallis, Man-Whitney U, Friedman and Wilcoxon tests.

**Findings:** Findings showed that there was a significant difference between headache intensity in the three groups after intervention ( $p=0.001$ ). Two by two comparison between groups showed that the decrease in headache was significant in Rose essential oil group compared to Acetaminophen group ( $p=0.001$ ). Also the decrease was significant in Acetaminophen group compared to placebo group ( $p=0.001$ ).

**Conclusion** Rose essential oil aromatherapy can be effective in reducing headache in patients receiving Nitroglycerine infusion. Further research is recommended in this area

**Keywords :** Rose oil , Aromatherapy , Headache Nitroglycerine

