A Study of Inhalation of Peppermint Aroma on the Pain and Anxiety of the First Stage of Labor in Nulliparous Women: A Randomized Clinical Trial

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Abstract

Background and Objectives: Considering the painfulness of labor and its resulting anxiety, and also, complications such as uterine dysfunction, prolonged labor, and unpleasant memories, the present study was performed aimed to investigate the effect of peppermint aroma on the level of pain and anxiety in the first stage of labor in nulliparous women.

Methods: This research was done as a clinical trial study on 128 nulliparous women assigned into two groups (64 subjects in aromatherapy group and 64 subjects in control group). In aromatherapy group, mixtures containing 0.2ml essence of peppermint and 2ml normal saline impregnated gauze, and in the control group, only 2ml normal saline impregnated gauze were attached to their dress collar, and the administration was repeated every 30 minutes. Level of anxiety was measured in dilatations 3-4 and 8-10cm and the intensity of pain in dilatations 4-5, 6-7, and 8-10cm. The data were collected through demographic and obstetric questionnaire, observation checklist, spielberger anxiety questionnaire, and pain numerical rating scale.

Results: In this study, the age, job, education, and gestational age were the same in both groups. Also, the level of anxiety was the same in both groups before the intervention, but after the intervention, anxiety level decreased in intervention group compared to control group (p<0.001). The mean pain score in the dilatations 4-5, 6-7, and 8-10cm decreased in intervention group compared to control group (p<0.001 for all).

Conclusion: Aromatherapy with peppermint essence is recommended for the reduction of pain and anxiety level during labor due to its inexpensiveness, ease and non-invasiveness.

Keywords: Aromatherapy; Labor Pain; Anxiety; Active Phase; Mentha Piperita; A Randomized Clinical Trial.