

# **Compare the effect of aromatherapy using lavender and Damask rose essential oils on the level of anxiety and severity of pain following C-section: A double-blinded randomized clinical trial**

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## **Abstract**

Anxiety is the most common psychological reaction in women during labor. Similar to numerous other surgeries, postoperative pain is also reported following cesarean section (C-section). According to the (Gate) Control Theory, there is a relationship between pain and psychological problems such as anxiety. Accordingly, the present study aimed to compare the effect of aromatherapy using lavender and Damask rose essential oils on the level of anxiety and severity of pain following C-section.

## **Methods**

This triple-group randomized clinical trial was performed on 90 mothers who visited Motahari Hospital of Jahrom, Iran, for C-section in 2017. The incidence and severity of pain and anxiety were measured and recorded for all three groups prior to intervention. The intervention groups underwent aromatherapy with lavender and Damask rose essential oils. Patients were asked to inhale cotton balls, separately stained with three drops of each essential oil at a distance of 10 cm for 30 mins. The severity of pain and anxiety was measured using the visual analogue scale (VAS) and the Spielberger State-Trait Anxiety Inventory (STAI) 5 min after the specified process, respectively. The control group underwent aromatherapy in a similar fashion with normal saline. Finally, data were analyzed using descriptive statistical indices and ANOVA and Kruskal–Wallis tests in SPSS 21.

## **Results**

There was no significant difference between the three groups in the mean severity of pain and anxiety before the intervention ( $p>0.05$ ). The mean severity of pain and overt anxiety in the lavender and Damask rose aromatherapy groups was significantly different than the control group after the intervention ( $p<0.001$ ). In addition, no significant difference was observed between the overt and overall anxiety levels of the two intervention groups after the intervention ( $p>0.05$ ).

## **Conclusions**

The findings suggested that inhalation aromatherapy can reduce the severity of overt anxiety and pain after C-section, with Damask rose essential oil showing a larger effect than lavender.

Keywords:

aromatherapy; pain; anxiety; Cesarean section

