Original Research Article

Effects of aromatherapy with *Rosa damascena* on nulliparous women's pain and anxiety of labor during first stage of labor

Sepideh Hamdamian, Soheila Nazarpour, Masoumeh Simbar, Sepideh Hajian, Faraz Mojab, Atefeh Talebi

PII: S2095-4964(18)30020-7
DOI: https://doi.org/10.1016/j.joim.2018.02.005
Reference: JOIM 20

To appear in: *Journal of Integrative Medicine*

Received Date: 28 September 2017
Accepted Date: 18 December 2017

Please cite this article as: S. Hamdamian, S. Nazarpour, M. Simbar, S. Hajian, F. Mojab, A. Talebi, Effects of aromatherapy with *Rosa damascena* on nulliparous women's pain and anxiety of labor during first stage of labor, *Journal of Integrative Medicine* (2018), doi: https://doi.org/10.1016/j.joim.2018.02.005

JIM-09-2017-RCT-0277

Original Research Article

Effects of aromatherapy with *Rosa damascena* on nulliparous women's pain and anxiety of labor during first stage of labor

Sepideh Hamdamian[1], Soheila Nazarpour[2], Masoumeh Simbar[3], Sepideh Hajian[1], Faraz Mojab[4], Atefeh Talebi[5]

1. Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran 1996835119, Iran
2. Department of Midwifery, Chalous Branch, Islamic Azad University, Chalous 4661961367, Iran
3. Midwifery and Reproductive Health Research Center, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran 1996835119, Iran
4. Department of Pharmacognosy, School of Pharmacy and Research Center of Pharmaceutical Science, Shahid Beheshti University of Medical Sciences, Tehran 1996835119, Iran
5. Department of Biostatistics, School of Paramedicine, Shahid Beheshti University of Medical Sciences, Tehran 1996835119, Iran

ABSTRACT

BACKGROUND: Reducing labor pain and anxiety is one of the most important goals of maternity care.

OBJECTIVE: This study aimed to assess the effects of aromatherapy with *Rosa damascena* on pain and anxiety in the first stage of labor among nulliparous women.

DESIGN, SETTING, PARTICIPANTS AND INTERVENTIONS: This was a randomised clinical trial of 110 nulliparous women. The eligible participants were randomly assigned to two groups of aromatherapy and control in an Iranian maternity hospital. The participants received 0.08 mL of *Rosa damascena* essence in the aromatherapy group and 0.08 mL of normal saline in the control group, every 30 min. Pain was measured 3 times, once each at three stages of cervical dilation (4–5, 6–7, and 8–10 cm). Anxiety was measured twice, once each at two stages of cervical dilation (4–7 and 8–10 cm). The tools for data collection were the Spielberger anxiety questionnaire, numerical pain rating scale, demographic and obstetric questionnaire, and an observational checklist. Data analyses included the *t*-test, Mann Whitney *U* test and Chi-square test.

MAIN OUTCOME MEASURES: Severity of labor pain and severity of anxiety were used as primary outcome measures. Labor and delivery characteristics (including number of contractions, duration of contractions in second stage, Bishop score, augmentation by oxytocin, Apgar score, and mode of delivery), demographic characteristics, and fertility information were used as secondary outcome measures.

RESULTS: Pain severity in the group receiving aromatherapy with *R. damascena* was significantly lower than in the control group after treatment at each pain assessment (cervical dilation of 4–5, 6–7, and 8–10 cm; $P < 0.05$). Anxiety levels were also significantly lower in the treatment group than in the control group after treatment at each time of measurement (cervical dilation of 4–7 and 8–10 cm; $P < 0.05$).