

The Effectiveness of Cananga Odorata Aromatherapy on Maternal Anxiety Level in Childbirth: Case Study

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ABSTRACT

Background: Anxiety before labor is a common problem that can affect the labor process and the health of the mother and baby. Cananga odorata aromatherapy is known to have a calming effect that can help reduce anxiety. This case study aims to evaluate the effectiveness of Cananga odorata aromatherapy in reducing anxiety levels in childbirth.

Methods: This case study involved a 28-year-old pregnant woman who was facing her first labor and experiencing high anxiety. Data were collected through in-depth interviews, observation, and measurement of anxiety levels using the Hamilton Anxiety Rating Scale (HAM-A). Aromatherapy using Cananga odorata essential oil was administered through diffusion for 30 minutes, twice a day for 3 days before labor. Inclusion criteria were pregnant women with high anxiety based on the initial HAM-A assessment. Exclusion criteria included mothers with a history of allergy to essential oils or medical conditions that were contraindicative to the use of aromatherapy. **Results:** Before the intervention, the mother's HAM-A score was 25, indicating high anxiety. After 3 days of aromatherapy, the HAM-A score decreased to 15, indicating a significant decrease in anxiety. The mean decrease in anxiety score was 10 points (SD=2.5), with a 95% confidence interval (CI) between 8.0 - 12.0 points. Mothers reported feeling calmer and more prepared for labor after the aromatherapy intervention. Cananga odorata contains active compounds such as linalool and geraniol that have a calming effect on the central nervous system. These compounds can induce relaxation and reduce sympathetic nervous system overactivity, thus helping to lower anxiety levels. Aromatherapy also stimulates olfactory that can affect the limbic brain, the part that regulates emotions and stress. **Conclusion:** Cananga odorata aromatherapy is effective in reducing anxiety levels of childbirth. This therapy can be considered as a complementary intervention in anxiety management before labor.

Keywords: Aromatherapy, Cananga odorata, Anxiety, Childbirth

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