Comparative Effect of Nature-Based Sounds Intervention and Headphones Intervention on Pain Severity After Cesarean Section: A Prospective Double-Blind Randomized Trial

AUTHORS

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Abstract

Background: Non-pharmacological treatment methods are being increasingly investigated for pain prevention and relief either alone or in combination with pharmacological treatment.

Methods: The present randomized placebo-controlled trial was conducted on 57 mothers undergoing elective cesarean section over 10 months from April 2015 to February 2016. The participants were randomly assigned to three groups: control, headphone, and nature-based sounds (N-BS). The investigator recorded pain severity every eight hours after the surgery. Mothers in the headphone group used headphones for 20 minutes (without playing sounds) and mothers in the N-BS group used headphones and listened to N-BS for 20 minutes. We played pleasant nature sounds for the N-BS group using media players and headphones. Mothers' pain severity was measured immediately before the intervention and 15 and 60 minutes after the end of the intervention.

Results: The N-BS group had a significantly lower pain severity than the headphone and control groups. Statistically insignificant differences were observed between the control and headphone groups indicating that headphone only did not reduce the pain in the intervention group. These reductions were more evident progressively in 15 and 60 minutes after the end of the intervention.

Conclusions: The application of N-BS for mothers undergoing elective cesarean section promotes nursing autonomy and the notion that nurses can influence the patient's environment.

Keywords

Cesarean Section Complementary Therapies Headphone Nature-Based Sounds Postoperative Pain