

Abstract

Original Article

A New Distraction Intervention to Reduce Venipuncture Pain in School-Age Children: Different Colored Flashlights; An Experimental Study with Control Group

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Abstract

Background: There is now sufficient evidence to conclude that cognitive-behavioral interventions are effective in reducing pain and distress for many.

Aims: To assess the effect of a new distraction intervention, as a practical and cost effective approach to reduce perceived pain and stress during venipuncture in healthy school-age children.

Methods: The study was carried out as an experimental study with a control group. Children (N=144), in whom venipuncture was applied at a child blood collection unit for examination were included in the study. The data were obtained using a form to determine introductory features about the children, and the Wong-Baker FACES Pain Rating Scale and the visual analogue scale to evaluate the pain. For the data analysis, mean and percentage distributions, chi-square test, analysis of variance, and correlation analysis were used. The ethical principles were adhered to in all cases.

Results: Children's pain severity connected to venipuncture in the control group was higher than the three experimental groups. The difference between the groups was determined to be significant ($p > 0.01$). Children's cortisol levels connected to venipuncture in the control group was higher than the three experimental groups. The difference between groups was determined to be insignificant ($p > 0.05$). Only a low positive correlation was found between the cortisol levels and pain severity ($p < 0.01$) in the children in the experimental and control groups. A negative moderate correlation was found between their ages and pain severity ($p < 0.001-0.01$) in the experimental and control groups.

Conclusion: It was detected that a new distraction intervention using different colored flashlights effectively reduced the pain and stress related to venipuncture in healthy school children. Distraction intervention with different colored flashlights is a method that nurses will be able to use for venipuncture to obtain optimal pain and stress control.

Key words: Children, Distraction, Nursing, Pain