Abstract

Introduction: Delivery is a sensitive experience and a major crisis in the lives of most women because pain and anxiety are an inevitable part of the process that disrupts the development and unpleasant experience of childbirth. The use of effective non-pharmacological methods to control pain and anxiety along with satisfaction is one of the most important goals of health care. The aim of this study was to compare the effec of virtual reality and chewing gum on the severity of pain, anxiety and mothers' satisfaction with delivery experience.

Methods: This clinical trial study was performed on ۹٦ women with first and second pregnancy and gestational age of ٤۲-۳۷ weeks who referred to Allameh Bohlool Hospitals and Sajadieh Torbat-e-Jam Hospital in Sanandaj in ۱۳۹۸-۱۳۹۷ who were eligible to enter the study. Women were randomly divided into three groups of chewing gum(۳۲people), virtual reality(۳۲people), and control group(۳۲people) using six permuted blocks method. In the cheving gum group, one gram of mint orbital gum was given to the Samples and they were asked to chew for ۲۰ minutes. In the virtual reality group, virtual reality glasses with landscapes of nature were placed on the eyes of the Samples for ۲۰ minutes. Chewing gum and virtual reality interventions were performed twice in ٤-٥cm and ۷-۸cm dilation for ۲۰ minutes in each group. There was no intervention in control group and only questionnaires were completed. The research instruments included visual analogue of pain, Spielberger's Anxiety Inventory scale, and McKay's childbirth Satisfaction Scale. Data were analyzed using SPSS software (version ۲۲) using Chi-square, ANOVA, Kruskal-Wallis, Tukey and covariance tests and a significance level of p<۰/۰٥ was considered.

Results: Before intervention, Pain and anxiety scores of the Samples were not significantly different between three groups (p <۰.۰٥), but after interventions, pain,

anxiety and satisfaction scores were significantly different in the three groups. Virtual reality and chewing gum group showed no significant difference ($p < ٠.٠٥$), but compared to control group, pain scores ($p < ٠.٠٤٦$), anxiety scores ($p < ٠.٠٠١$) and satisfaction scores ($p = ٠.٠٠٠$), they were significantly different.

Conclusion: This study showed that chewing gum can reduce the pain and anxiety of the first stage of labor, and increase mothers' satisfaction. Using virtual reality without complications can also increase mothers' satisfaction with the delivery experience and reduce pain and anxiety during childbirth. Therefore, chewing gum and virtual reality in bed can be used to promote natural childbirth and improve midwifery services with the aim of maternal satisfaction as a way to reduce pain and anxiety.

Keywords: labor pain, satisfaction, labor, anxiety, virtual reality, Mint gum