

Abstract

Objective: Anxiety is one of the most commonly reported related psychological consequences in cancer patients undergoing chemotherapy, which leads to many problems in the patient. The use of non-pharmacological approaches and relaxation techniques such as laughter therapy along with pharmacological methods can play an important role in controlling patients' anxiety. The aim of this study was to determine the effect of laughter therapy on anxiety in patients undergoing chemotherapy.

Methods: This study is a semi experimental study that was performed from the beginning of October 2020 for 3 months on 60 patients with gastrointestinal cancers undergoing chemotherapy in two groups of intervention and control (30 sample in each group). Minimization method (based on age, sex and severity of the disease) was used to allocate samples in the two groups. For 3 consecutive days and every day for 30 minutes, a comedy film and a humorous clip were shown to the intervention group. In the control group, the samples received routine care during this period. Spielberg Anxiety Questionnaire was completed 30 minutes before and 30 minutes after the laughter therapy intervention in both control and intervention groups. Data were analyzed using the Spss software.

Results: Mean and standard deviation of anxiety score in laughter therapy group reached 44.43 ± 11.66 on the first day before the intervention to 36.33 ± 7.94 on the third day after the intervention. And in the control group on the first day from 44.90 ± 8.75 to 38.93 ± 7.46 on the third day ($P = 0.001$). Although the decrease in anxiety score on the first day compared to the third day was obvious in the intervention group, but was not statistically significant and in comparison with the two groups, the reduction in anxiety was more in the intervention group.

Conclusions: The results of this study showed that the severity of anxiety in patients in the control and intervention groups decreased over time, but this decrease was not significant between the two groups but was able to reduce the severity of anxiety in the study units. Due to the non-invasive nature of laughter therapy to reduce patients' anxiety and lack of side effects, it is recommended to use chemotherapy to reduce the anxiety of patients with gastrointestinal cancers.

Key words: Laughter therapy, anxiety, chemotherapy