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Investigating the Effect of Video Training on Anxiety Level of Patients Candidate for Coronary Angiography

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Dear Editor:

Face-to-face training is one of the most common methods of patient training in which trainers provide training individually and for special learners (1-3). In addition, it provides an opportunity to bring up ideas and feelings between the learner and the trainer verbally and non-verbally (4-6).

The study was carried out at Mustafa hospital, Ilam city, Iran, during January to February 2017. Patients who were candidates for coronary angiography were divided into case and control groups. First, anxiety in both groups was measured using the Spielberger's state-trait anxiety inventory (STAI) (7, 8). Then, the case group watched a training CD which was about 30 minutes and contained issues such as the etiology and pathology of heart diseases and the diagnosis and treatment of coronary angiography. In the rest of the movie, all the applied precautions and procedures were provided and the observations after angiography until the discharge and the postoperative care following coronary angiography were explained.

After watching the training movie, the questionnaire was given to the two groups again to be completed and the anxiety level was measured. We had a training intervention using a training CD that was used to measure anxiety level in two group, before and after training. According to the following statistical formula, at least 20 patients in each group were selected as the sample size. In total, the sample size was 40 patients in which, 20 patients were enrolled in the control group and 20 patients in the case group.

The Spielberger's state-trait anxiety inventory (STAI) was used to measure the manifest anxiety of the patients. This scale contained 20 short sentences related to the manifest anxiety in the form of a 4-point Likert-type scale (1 to 4) ranging from mild to severe anxiety. The total scores ranged from 20 to 80 classified into three groups as follows: 20 to 39 as mild anxiety, 40 to 59 as average anxiety, and 60 to 80 as severe anxiety. Descriptive statistical analysis (including mean values and standard deviation), analytical statistical one-way ANOVA (analysis of variance), and T-test were used in the study. The results showed that the level of anxiety in the control group before training included was as follows: 25% had mild anxiety (20 - 39 points), 65% had moderate anxiety (40 - 59 points), and 30% had severe anxiety (60 - 80 points). Most of the patients in the case and control groups had a moderate anxiety before training. There was no statistically significant difference in the control group before and after training and they were homogeneous in terms of anxiety (P Value = 0.146).

Moreover, the results indicated that the anxiety level in the control group after training was as follows: 35% had mild anxiety (20 - 39 points), 55% had moderate anxiety (40 - 59 points), and 10% had severe anxiety (60 - 80 points). The level of anxiety in the case group after training included the following cases: 65% had mild anxiety (20 - 39 points), 35% had moderate anxiety (40 - 59 points), and 0% had severe anxiety (60 - 80 points). That is, after the intervention and training, the level of severe anxiety in the control group decreased, but the reduction was greater in the case group and the majority of the group members had mild anxiety after training. The above-mentioned statistical test results showed that the anxiety level of the case group before and after training had a statistically significant difference (P Value = 0.041).

The results showed that the use of both methods of face-to-face training and video training reduced the patients' anxiety. Therefore, the results indicate that the lack of knowledge and awareness of patients can have a direct relationship with their anxiety level so that the patients experience less anxiety after training. Nevertheless, the reduction of anxiety was very remarkable in the case group who were trained through the video and the significant dif-

ference was evident. However, the face-to-face training had priority and its effects were more obvious in reducing the anxiety of patients.

Accordingly, it can be concluded that nurses can use training videos both to increase the awareness of cardiac patients candidate for angiography and to control and reduce their anxiety. The findings of the present research help clinical nurses apply video training as an appropriate training method to train patients.

Footnotes

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