

# Effect of behavioral-cognitive education on reduction of anxiety in women with primary infertility who undergo GIFT and ZIFT

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## Abstract

**Introduction:** Infertility is a complex crisis in life that leads to psychological and emotional stress in couples. Infertility and its treatment are breeding grounds for stress. Cycles of hope followed by crushing disappointment, along with the high costs and low success rates of medical therapies, can lead to depression, anxiety and many other psychological problems. Since, the success in programs called Assisted Reproduction Technology (ART) depend on the adjustment strategies to anxiety and stress which significantly arise during treatment procedures, a quasi experimental research project was designed to determine the effects of one of the behavioral-cognitive techniques on reduction of anxiety in women with primary infertility who undergo GIFT/ZIFT, in infertility clinic of Shariati Hospital during July- Febuery 2002.

**Materials and Methods:** The sample group composed of 60 women with primary infertility who were allocated into two experimental (n=30) and control (n=30) groups. The preliminary evaluation of the state and trait anxiety of all subjects was conducted on day 21 of the menstrual cycle by Spielberger Anxiety Inventory. The intervention in the experimental group included a behavioral cognitive training program, cognitive restructuring and relaxation for 15-20 days. The control group received only routine cares. The state and trait anxiety were again evaluated in all participants 2 days before and 2 days after the operation.

**Results:** Results showed that the state and trait anxiety scores at the beginning and the end of study were not significantly different between the two groups. But the state and trait anxiety scores before GIFT/ZIFT operations were significantly lower in the experimental group ( $P=0.002$  and  $0.028$ , respectively). The state and trait anxiety was significantly different between before and after intervention in experimental group ( $p=0.0001$ ), but not in control group. The mean variation of state and trait anxiety from following intervention to after study and form before intervention to after study was significantly different in the two groups ( $p<0.05$ ).

**Conclusion:** The results showed that behavior cognitive education are effective in reduction of anxiety in primary infertility cases that undergo ART treatment. Besides, in women who showed anxiety reduction following intervention, the rate of successful treatment was significantly higher compared with the control group. Concerning the positive effect of behavior cognitive education and emotional support of infertile cases on reduction of anxiety and improvement of success rate, we recommend, the instructional and supportive programs to be promoted by the expert teams including psychologists.

**Key Words:** Cognitive- Behavioral education, Anxiety, Infertility, ART, GIFT, and ZIFT.

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