

The effect of progressive muscle relaxation training with demonstration method on stress and anxiety of nurses encountering of COVID-19

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Summary: The Coronavirus Disease 2019 (COVID-19) pandemic has increased psychological problems of nurses such as stress and anxiety. This study aimed to determine the effect of progressive muscle relaxation training with demonstration method on stress and anxiety of nurses encountering COVID-19.

Methods-Results: This randomized clinical trial was conducted in 2020-2021. Forty-six nurses working in COVID wards of two hospitals in Tehran, Iran were selected by convenience sampling method and randomly assigned into intervention and control groups. The progressive muscle relaxation technique was educated to the intervention group by demonstration training method and the nurses were encouraged to perform it. Data were collected by demographic characteristics questionnaires and the stress and anxiety section of the DASS-21 questionnaire.

Results: Stress scores in nurses in the intervention and control groups were (27.82 ± 4.82 vs. 28.69 ± 5.48 , $P=0.571$) before the intervention, while after the intervention reached ($21.91 \pm 04/02$ vs. 28.34 ± 4.69 , $P<0.001$), respectively. In the intervention group, the nurses' stress in the post-test phase was significantly reduced ($P<0.001$), but in the control group, no significant change was seen ($P=0.257$). Anxiety scores in nurses in the intervention and control groups were (26.69 ± 6.83 vs. 25.56 ± 4.42 , $P=0.510$) before the intervention, while after the intervention reached (18.95 ± 4.74 vs. 25.82 ± 3.71 , $P<0.001$), respectively. In the intervention group, the nurses' anxiety in the post-test phase was significantly reduced ($P<0.001$), but in the control group, no significant change was seen ($P=0.479$).

Conclusion: Considering the effectiveness of progressive muscle relaxation training by demonstration method on stress and anxiety of nurses encountering COVID-19, it is

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recommended that during the crisis including COVID-19 pandemic period, it be educated for nurses and that their temperament be encouraged.

Keywords: Progressive Muscle Relaxation, Stress, Anxiety, COVID-19, Nurse, Education, Training