# THE INFLUENCE OF MUSIC THERAPY ON DEPRESSION AND ANXIETY LEVELS OF HEMODIALYSIS PATIENTS

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### **OBJECTIVES**

The purpose of this study was to determine the effects of music therapy on anxiety and depression in patients undergoing hemodialysis with different comorbidity status.

## **METHODS**

The data were collected in the hemodialysis center of City Hospital in Moscow. Research was conducted between June and December 2014. The study population consisted of 53 patients who received dialysis. The study was designed using a nonequivalent control group pretest-posttest design (Experimental group: 24, Control group: 29). All patients completed a series of questionnaires, including the Beck Depression Inventory (BDI), the Hospital Anxiety and Depression Scale, (HADS). The Charlson Comorbidity Index calculated in all patients. The collected data was analyzed by the SPSS 10.0 program.

#### CHARACTERISTIC OF GROUPS

|                                     | Experimental | Control |
|-------------------------------------|--------------|---------|
|                                     | group        | group   |
| Patients                            | 24           | 29      |
| Mean age, years                     | 60,3         | 61,3    |
| Mean duration of HD therapy, months | 59           | 47      |
| Charlson Comorbidity Index          | 5,7          | 6,1     |

#### **RESULTS**

|              | BDI    |       | HADS,<br>anxiety/depression |                  |
|--------------|--------|-------|-----------------------------|------------------|
|              | Before | After | Before                      | After            |
| Experimental | 19,2   | 17,7  | <b>10*</b> /8,2             | <b>9,2</b> */8,3 |
| group        |        |       |                             |                  |
| Control      | 13,2   | 13,0  | 7,0/8,0                     | 7,2/7,5          |
| group        |        |       |                             |                  |

\* p=0,01

## RESULTS

The first hypothesis that patients undergoing hemodialysis who received music therapy would have less anxiety than patients undergoing hemodialysis who did not receive music therapy was supported (p=0,01). The second hypothesis that patient undergoing hemodialysis who received music therapy would have less depression than patients undergoing hemodialysis who did not receive music therapy was not supported (p>0,05). Levels anxiety and depression did not change over time in the Control group. States anxiety and depression correlated with Charlson Comorbidity Index r=0,7; p<0,05) in both groups. Effects of music therapy on patients with the high Charlson Comorbidity Index was less (p<0,05).

## CONCLUSIONS

The results of this study suggest that music therapy may be used as a method of intervention contributing to the improvement of quality of life by reducing their anxiety of hemodialysis patients. The degree of influence depends on the Charlson Comorbidity Index.







