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# "Effects of exergames on quality of life, pain and disease impact in women with Fibromyalgia: A randomized controlled trial".

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# **Abstract**

# **OBJECTIVE:**

To evaluate the effects of an exergame-based intervention in a population sample of women with fibromyalgia.

### **DESIGN:**

This study was a single-blinded, randomized controlled trial for 8-week intervention.

### **SETTING:**

Fibromyalgia center.

# **PARTICIPANTS:**

Participants (only women) were divided into two groups: an exercise group (n=42; mean age  $\pm$  SD, 52.52  $\pm$  9.73) and a control group (n=41; mean age  $\pm$  SD, 52.47  $\pm$  8.75).

# **INTERVENTION:**

Women in the exercise group completed an 8-week exergame-based training program, which was focused on postural control and coordination of the upper and lower limbs, aerobic conditioning, strength, and mobility. Women (groups of three) were encouraged to exercise for 120 minutes (over two sessions) per week.

# **MAIN OUTCOME MEASURES:**

Pain and disease impact were assessed with the Fibromyalgia Impact Questionnaire (FIQ), a specific measure to be applied in fibromyalgia. Secondary outcome measure included quality of life, which was assessed with the European Quality of life-5 Dimensions-5 Levels generic instrument (EQ-5D-5L).

# **RESULTS:**

The results showed that 97.62% of participants in the exercise group completed the 8-week intervention. The exercise group showed a significant improvement (p < .05) in the EQ-5D-5L utility index, and in three of five dimensions. For the FIQ, significant improvements were observed in the dimensions "pain", "stiffness", "anxiety", and "feel good". FIQ score was also reduced. The mean between-group improvement (95% CI) was 8.25 (2.85-13.65).

# **CONCLUSIONS:**

The results and levels of compliance/adherence suggest that this exergame-based training program is an effective intervention for reducing pain and increasing health-related quality of life in women with fibromyalgia.