

## Original Paper

# Effect of eight weeks aerobic training and drug intervention on quality of life in women with type 2 diabetes

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### Abstract

**Background and Objective:** The quality of life is adversely affected by type 2 diabetes as a serious metabolic disorder. This study was done to investigate the effect of aerobic training and drug intervention on quality of life in women with type 2 diabetes.

**Materials and Methods:** In this randomized clinical trial study, 52 women with type 2 diabetes divided into four groups including aerobic training with full medicinal doses (group I), aerobic training with half medicinal doses (group II), full medicinal doses without training (group III) and half medicinal doses without training (group IV). Subjects in aerobic training groups participated in 8 weeks training program. Duration of each training session was 45 minutes from the beginning and increased gradually until 105 minutes. Full medicinal doses included Metformin (500 mg) and Glibenclamide (5 mg). Half medicinal doses included Metformin (250 mg) and Glibenclamide (2.5 mg), daily. Subjects without training, did not participate in any physical activities. Quality of life was assessed using SF-36 questionnaire. Data were analyzed using SPSS-18, ANOVA and t dependent tests.

**Results:** There was no significant difference regarding quality of life between groups at pre-test. After the intervention, the quality of life in group I significantly increased ( $P<0.05$ ). In group II, all subscales of the quality of life increased; however, only social function was significant ( $P<0.05$ ). In group III, all subscales of the quality of life decreased; however, physical function, emotional and pain were significant ( $P<0.05$ ). In group IV, the quality of life significantly decreased ( $P<0.05$ ).

**Conclusion:** Aerobic training with full medicinal doses could improved the quality of life in women with type 2 Diabetes.

**Keywords:** Diabetes mellitus, Aerobic training, Quality of life

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Received 23 May 2011

Revised 10 August 2011

Accepted 17 September 2011