

## ***The Effect of Aquatic Exercise on Quality of Life, Body Mass index and cardiovascular Markers in Middle-aged Women: a pilot study***

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### ***Abstract***

**Background & Aim:** Midlife is one of the most important steps of life that in case of lack of exercise, can lead to a significant reduction in quality of life. The aim of this study was to investigate the effect of 8 weeks of Aquatic Exercise on quality of life, Body Mass index, and cardiovascular Markers in Middle-aged Women.

**Methods:** After measuring anthropometric markers, 20 women aged between 45 and 55 years were randomly assigned into two groups of aquatic exercise (n=10) and control (n=10). In the baseline stage, both groups completed WHOQOL-BREF scale to assess the quality of life. Moreover, Body Mass index and cardiovascular Markers were measured. The exercises in aquatic exercise group were performed in 60 minutes sessions twice a week for eight weeks. At the end of the eighth week, study parameters were measured in both groups.

**Results:** Eight weeks of aquatic exercise significantly increased the quality of life in middle-aged women ( $P=0.001$ ), so that in addition to the overall life quality scores, the subscales including mental health ( $P=0.001$ ), social relationships ( $P=0.02$ ) and environmental health ( $P=0.001$ ) were improved. In addition, blood pressure ( $P=0.04$ ) and body mass index ( $P=0.001$ ) were significantly decreased.

**Conclusion:** Eight weeks of aquatic exercise may significantly increase the quality of life and improve Body Mass index and cardiovascular indices in middle-aged women.

**Keywords:** Aquatic exercise, middle-aged women, quality of life, Body Mass Index

