

Water aerobics as a means of increasing the psycho-emotional status of women

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Abstract. *The article aims to assess the impact of water aerobics on the psycho-emotional status in women. Materials and methods: the study involved 20 women aged 25–35 years. All women were divided into 2 groups, 10 people each. Group A was engaged in water aerobics according to our methodology. A comparative analysis of the impact of water aerobics on the psycho-emotional status in women was carried out. The study was conducted for six months on the premises of the Yubileiny pool. Results: water aerobics has improved the emotional status of women. The indicators of "well-being" and "mood" significantly increased. Conclusion. Water aerobics has a healing effect on women aged 25–35 years. This effect is expressed in improving the psychoemotional and morphofunctional status of the body.*

Keywords - *water aerobics, psycho-emotional status, 25-35-year-old women, swimming, physical activity, water fitness, mood, self-esteem.*

I. INTRODUCTION

Any aerobic activity, of course, affects the human body, and this effect can be called a "physiological" and "biomechanical" effect. Almost all of these types of physical activity for women are aimed at creating an optimal mode of movement. Modern aerobics has a variety of types such as step, funk, slide, water aerobics, etc. [2–4].

In water, physical imperfections and awkward movements are hidden from the others' eyes. This allows students to feel more comfortable and makes them more relaxed. They can better concentrate on the task, which helps them more easily deal with it. Therefore, this improves the positive effect of training. Regular training will help women improve their shape and movement coordination and will have a long-term positive effect on their self-esteem and psychological status [1, 5].

II. MATERIALS AND METHODS

The experiment was conducted on the premises of the Yubileiny swimming pool in Chelyabinsk.

The study involved 20 women aged 25–35 years. Women were divided into 2 groups (A and B), 10 people each. Group A was engaged in water aerobics according to our wellness

program, and Group B was swimming in the pool while listening to music. A comparative analysis of the effect of water aerobics on the psycho-emotional status of women was carried out.

When conducting training, we took into account the basic principles of a wellness program: gradualness, repetition, individualization. An integrated approach allowed us to combine aerobics, stretching, athletic gymnastics, as well as coordination and breathing exercises in one program. Music was considered as an active element of training. When choosing music, we took into account its tempo. For relaxation and stretching exercises, music at a speed of 40-60 bpm (slow pace) was used; for exercises involving the muscles of the back, shoulder girdle and legs - 60–80 bpm (average pace); for running, jumping and dancing exercises - 80-100 bpm (fast pace).

III. RESULTS AND DISCUSSION

We found that at the end of the program of water aerobics, almost all participants noted improvement in their health and mood. Several times before and after training a test for differentiated self-esteem was conducted according to three parameters: "well-being", "activity", "mood".

Throughout the study in the classroom, there was an improvement in the indicators of "well-being", "activity" and "mood" in all women from the group A.

In general, test scores for women from the group B are similar to those from the group A (Figure 1). However, during training in the group B, the indicators before and after the study practically did not change. Comparing the results of the test (Table 1) using the t-criterion for the reliability of differences, it was noted that before the classes, the values of all three indicators in both groups were the same, since no statistically significant differences were found. However, after a six-month training in the swimming pool, the "well-being" indicator significantly improved in the group A, compared with the group B. Perhaps this is due to overwork.

TABLE I. COMPARISON OF TEST INDICATORS USING T-CRITERION OF RELIABILITY

Parameter	Before the experiment				After the experiment			
	Group A M ± m	Group B M ± m	t-criterion	P <	Group A M ± m	Group B M ± m	t-criterion	P <
Well-being	5.45 ± 0.33	5.46 ± 0.34	-0.85	P > 0.05	6.49 ± 0.29	5.56 ± 0.25	2.46	P < 0.05
Activity	5.42 ± 0.27	5.45 ± 0.46	-1.18	P > 0.05	6.46 ± 0.32	6.45 ± 0.51	0.95	P > 0.05
Mood	5.71 ± 0.33	5.88 ± 0.54	-1.95	P > 0.05	6.70 ± 0.31	6.16 ± 0.62	2.18	P < 0.05

Note: M±m – mean value of the test; ± - error;

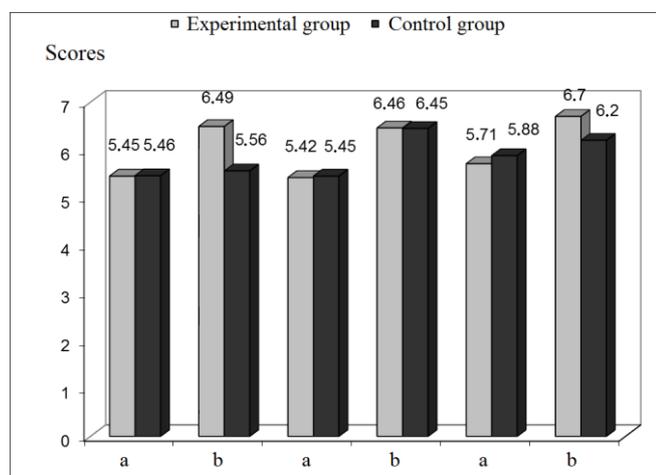
t-criterion – Student’s t-criterion;

P<- significance level

Based on a comparative analysis of the test indicators presented in the table, the mean values of “activity” after training improved in both groups, which is associated with a fairly high physical activity both in the group A and in group B.

FIG. I. CHANGE OF INDICATORS OF DIFFERENTIATED SELF-ASSESSMENT IN WOMEN

(A - INDICATORS BEFORE THE TRAINING COURSE, B - AFTER THE TRAINING COURSE)



The mean value of the mood indicator after our water aerobics program was 6.7 points, and in the group of women involved in swimming - 6.16 points. The high value of the indicator of the group A is possibly associated with the group form of training and the use of special equipment (belts, water dumbbells, fins, noodles, etc.)

During the survey on the emotions that most accurately describe the mental state during water aerobics, 66% of the women noted joy and fun, 20% felt relieved after training, 10% considered the interest to be the main emotion.

Thus, water aerobics has contributed to improving the emotional status in women. The indicators of "well-being" and "mood" increased significantly.

IV. CONCLUSION

1. During the research, the indicators of “well-being” and “mood” significantly changed, which confirms the positive effect of water aerobics on the mental state.

2. During the survey on the emotions that most accurately describe the mental state, after six months of regular training in water aerobics, the indicators of “well-being” (P < 0.05) and “mood” (P < 0.05) improved, the indicator of "activity" remains the same in both groups (P > 0.05).

3. Water aerobics has a healing effect on women aged 25–35 years, which is expressed in improving their psychoemotional and morphofunctional status of the body.

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