**Abstract:**

**Title:** The influence of water activity on respiration behaviour of women after breast ablation.

**Aim:** We aim to design and verify a programme of water exercises for women after breast ablation which would have a positive influence on their health. In our pedagogical experiment we want to discover the effect of breathing exercises in water environment on respiration capacity and strength of respiration muscles (inspiration and expiration muscles).

**Methods:** Sociological research was used in order to find suitable probands. The examination of functions of respiration muscles was used in order to evaluate strength of respiration muscles. We measured strength of respiration muscles (inspiration PI max and expiration muscles PE max). Spirometry testing, volume-time curve and a flow-volume loop, set values for inspiration (VCinsp) and expiration (VCexp). The examination was carried out in Krajska zdravotni a.s, Usti nad Labem at the department of Functional Diagnostic. Results were evaluated by statistic program STATIS TICA. We used describing statistics, categorization, data analysis, t-tests, Wilcoxon and Mann Whitney testing.

**Conclusion:** Water activity related to breast exercises had a positive influence on values of PI max, VC insp a VC exp which demonstrate results of Wilcoxon test. Some differences were found out between a group of women participating in our programme of water exercising and a control group. Generally speaking the differences were not statistically important according to Mann Whitney testing. A positive influence on women participating in programme of water activities had breathing volume exercises. The value of strength of inspiration muscles increased. 67 % of women valuated the intensity of exercising as adequate, 33 % of women as easy. Generally our program was valuated as contributing factor for our health.

**Key words:** Breast ablation, Water activity, Breathing exercises