

EFFECTIVENESS OF WATER THERAPY WITH COLD WATER, WARM WATER AND CONTRAS WATER AGAINST PAIN, FATIGUE, AND MUSCLE ENDURANCE IN UNY BADMINTON PLAYERS

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ABSTRACT

This study aims to examine and determine the effectiveness of this type of water therapy by using cold water, warm water, and water contrast against pain, fatigue and muscular endurance disorders in UNY badminton players.

This study uses a quasi experimental design research method with a three group time series design (pretest one post test). In this design the first observation (pretest) and then the treatment (cold foot bath therapy, warm and combined cold and warm) after that, posttest observation three times. The treatment group was measured by giving a type of water therapy in the form of cold water, warm water, and water contrast against pain, fatigue and muscular endurance. The research sample is taken from the existing population using purposive sampling method. Data collection is obtained through tests and measurements. Test instrument used to measure pain with a numerical rating scale, fatigue is measured by performing a reaction test with a wall body reaction and to measure endurance with a wall sit. Data analysis technique used is the analysis of variance.

Based on the results of the study it can be concluded that warm water therapy is effective to relieve fatigue and is effective in increasing muscle endurance with a significance value of fatigue variable 0.008 and muscle endurance 0.002. Cold water therapy is effective to reduce pain disorders with a significance value of 0.048 and cold water and warm water combination therapy (contras water) has effectiveness on the variables of pain, fatigue and muscle endurance with a significance value of the pain variable 0.001, fatigue 0,004 and muscle endurance 0,001. The most effective water therapy to relieve fatigue by using warm water. Whereas the most effective water therapy to reduce pain disorders and increase muscular endurance by using water contrast.

Kata Kunci: *water therapy, pain, fatigue and muscular endurance*