

## **Abstract**

**Title:** Evaluation of changes in the locomotor apparatus of soldiers after applying the elements of health and physical education during a three-month intervention

**Aim of the Thesis:** To emphasize the meaning of health and physical education conduct (hereinafter referred to as health and PE), to apply a set of common health and PE elements during the three-month intervention, to assess the changes in the locomotor apparatus of experimental groups and control groups, and according to the results obtained, to recommend health and physical education as an integral part included in the system of military physical education and training.

**Methods Used:** Empirical approach and research methods were used in this thesis. The concept of a quasi-experiment was used in the research too. The research had three phases: introductory muscle examination, intervention and final muscle examination, followed by a questionnaire. The examined package comprising 60 soldiers was divided into two experimental groups (2 x 20 soldiers) and one control group (20 soldiers). The testing method assessed the locomotor apparatus state of the examined group. Common elements of the health and PE were selected and applied to the experimental groups on the basis of the introductory test of muscle functioning. The evaluation of the state changes of the locomotor apparatus of the experimental groups was completed with questionnaire data, containing 10 closed questions and 4 questions with the option of stating the individual changes of soldiers relating to the health and PE elements application.

**Results:** The current situation of applying health and PE elements in the locomotor regime of soldiers is inadequate. The states of muscular imbalance improved with more than 50% soldiers after the health and PE elements were applied during the three-month intervention.

**Key Words:** Military physical education and training, chief of physical training, health and physical education, health focused skill, substitute exercise, locomotor system, poor posture, and regeneration.

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