**Summary**

The back pain may affect the entire spine or individual sections. Lumbar-sacral pain
is a global problem, which has become a civilization disease leading to long-term limitations in human functioning, or his disability.

The aim of the conducted research is the effectiveness of selected combined therapy treatments during sanatorium treatment in patients with pain in the lumbar – sacral section spine, their impact on the fitness and quality of life of patients.

The research was conducted at the Sanatorium of the MSWiA in Kołobrzeg among sanatorium patients aged 50-70 who suffered from chronic spine pain in the lumbar-sacral section of degenerative etiology and/or overload, participating in 21-day stays from July 2019 to September 2022. The study included 150 people diagnosed with non-specific lower back pain syndrome. Patients were randomly divided into three groups of 50 people.

All calculations were made in the STATISTICA 8 program. The aim of the analyzes was to check whether the quality of sanatorium treatment differs depending on the selected treatments. The results of two experimental groups were compared (combined therapy) with the results of the control group, taking into account the intensity of pain and the assessment of functional capacity, as well as determining whether the treatment methods included in the study are equally effective in women and men. Changes in the level of dependent variables were monitored in two measurements performed on the same subjects before the start and after completion of treatment.

Based on the analysis of the obtained results, it can be concluded that all sanatorium treatment methods lead to improvement of the tested parameters, but the use of combined therapy allows to achieve a better therapeutic effect and confirmed the following conclusions:

1. Combined therapy is an effective method of treating pain in the lumbar-sacral spine during a sanatorium stay.

2. In combined therapy, the therapeutic effect was independent of the use of a physical stimulus. Combined therapy treatments showed better results than standard sanatorium treatment offered by the National Health Fund.

3. Combined therapy increases patients' physical activity.

4. Combined therapy has a positive impact on the quality of life of patients after completing sanatorium treatment.