**The effect of therapeutic whole body cryotherapy treatment for depression in patients with back pain syndrome.**

Dr n. med. Lukasz KIKOWSKI

Department of Psychiatry

Head of Department: prof. dr hab. Antoni Florkowski

Doctoral Dissertation – abstract

Advisor - prof. dr hab. Antoni Florkowski

Reviewers – prof. dr hab. Jan Czernicki, prof. dr hab. Andrzej Kiejna

Official Doctoral Dissertation Date – 19th of February 2013

Approved by the Scientific Council of Military Medical Faculty - 5th of March 2013

**Introduction.** Depressive disorders are among the most common mental disorders in modern societies.

**Aim.** The aim of study was to evaluate the therapeutic effect of a series of 10 whole – body cryotherapy treatments combined with kinesitherapy on the severity of: major depressive disorders, pain discomfort and sense of well – being in patients with spinal pain syndromes.

**Material/Methods.** The study included 300 patients. In all of the patients chronic pain syndrome caused by degenerative spinal disease was the main complaint because of which the patients sought medical attention.

The study utilized, in addition to data from medical records, standardized methods: Beck Inventory, Numerical Rating Scale, 36 – Item Short – Form Health Survey.

**Results.** Patients were divided into three groups: B1, B2, P. The mean score for depressive disorders decreased from 18.0 to 12.7 in B1 group, from 17.8 to 12.4 in B2 group, from 5.4 to 3.8 in P group. In B1 group before the study the mean value for pain measurement was 5.1 and after the therapy it decreased to 4.4. In group B2 the initial value was 4.8 and it decreased to 3.9, in group P the decrease was from 3.8 to 3.2. The quality of life index improved for group B1 by 4.5 points, for group B2 by 5.0 points, for group P by 4.0 points respectively.

**Conclusions**. Whole – body cryotherapy reduces depressive symptoms severity in case of mild to moderate depression intensity, reduces the severity of pain in patients with spinal degeneration and positively affects the patient quality of life.