

## ABSTRACT

**Introduction:** Thanks to the progress of the today's medicine, in particular its therapeutic possibilities, the number of patients overcoming critical acute respiratory failure has increased, resulting in their exposure to stress and impact of intensive care. Thus, we can say that almost every patient suffers from at least one sign of post-intensive care syndrome.

The theoretic part of the Diploma Thesis deals with acute respiratory failure and PICS. Materials used to prepare this work were obtained from a research made by the National Medical Library and from sources found in expert databases (PupMed, ResearchGate, ScienceDirect etc.).

**Aim of the work:** The aim of this work is to examine and evaluate the physical and mental state of patients after overcoming the acute respiratory failure and their return to normal life with post-intensive care syndrome. We've divided this main goal into several partial objectives with the main research questions if the signs of PICS can be impacted by the length of artificial ventilation.

**Methodology:** As a part of the research survey and data collection a qualitative research survey was performed on patients with acute respiratory failure by using standardized questionnaires: DEMMI, ADL, IADL, HADS, MAF, SF 36 and physical tests: 30-s SCT, 6 MWT and use of Garmin Vívofit wristband. We collected data in four time periods marked T0, T1, T2 and T3. First data was acquired in emergency rooms before hospitalization (in intensive care units before hospitalisation), than during release from the first level of intensive care unit a day before a release from the intensive care unit and three months after the release from the intensive care unit. Processed data were obtained from 55 patients.

**Results:** When comparing T0, T2, T3 periods patients' results worsened in T2 and improved in T3. Even though the results improved in T3, they did not reach the level of T0. When comparing the sexes women had worse results than men in all examined areas. When comparing the impact of the length of the ventilation on both sexes, patients ventilated for more than 10 days had worse results which affect PICS.

**Conclusion:** Patients overcoming acute respiratory failure are affected not only by the disease itself, but also by the impact of intensive care with the signs of PICS, and have difficulties returning to normal everyday life.

**Benefits of the work:** Confirmation of the impact of intensive care on a patient and recommendations for practice based on these findings. Detecting and revealing women group as higher risk group for post-intensive care syndrome. Creating information leaflet for patients and their families to increase awareness of post-intensive care syndrome.

**Key words:** acute respiratory failure, ARDS, post-intensive care syndrome, PICS, quality of life, intensive care