Objective. To compare psycho-cognitive status of elderly patients with various comorbidities depending on the presence of post-covid syndrome.

Materials and methods. This observational analytical cohort study included 133 patients with atrial fibrillation and various comorbidities (coronary artery disease, arterial hypertension, obesity, type 2 diabetes mellitus (T2DM)) aged 60–72 years with and without history of SARS-CoV-2 infection and post-covid syndrome (PCS). Patients were divided into 2 groups: group 1 included 123 patients without the history of COVID-19, group 2 — 110 patients with the history of SARS-CoV-2 infection. All study participants underwent general clinical examination; assessment of psycho-cognitive status using the "SPMSQ" and "HADS" scales. Statistical analysis has been performed using RStudio software.

Results. Anxiety and depression have been established in 49–61 % of patients with comorbid diseases and were more prevalent among patients after COVID-19.

Subclinical anxiety was seen in 29 % of patients without COVID-19 and in 27 % of patients with PCS; clinically significant anxiety — in 13 % of patients from both groups.

The analysis of patients' cognitive functions showed that cognitive dysfunction was more prevalent among patients with PCS (p = 0.007); while the prevalence of mild cognitive impairment was comparable between groups, but was higher among patients with PCS – 22 % vs. 8 % (p = 0.005). Severe cognitive impairment was seen only in patients with PCS – 2 %. The analysis of separate groups with various comorbidities showed significant differences in patients with T2DM, 51 % in those without PCS compared with 28 % among patients with PCS (p = 0.012).

Conclusion. The effects of COVID-19 remain uncertain. Therefore, the assessment of long-term consequences after the infection in patients with various comorbidities is required and can be achieved by reprofiling and initiation of large cohort studies aimed not only to assess long-term outcomes of SARS-CoV-2 infection, but also to investigate psycho-cognitive dysfunction.