

# Variants of the post-COVID syndrome course depending on age, gender, comorbidity and severity of COVID-19

L.D. Todoriko<sup>1</sup>, O.S. Shevchenko<sup>2</sup>

1. Bukovinian State Medical University, Chernivtsi, Ukraine

2. Kharkiv National Medical University, Kharkiv, Ukraine

**Conflict of interest:** none

**BACKGROUND.** Among residents of Chernivtsi region, the main characteristics, frequency and peculiarities of the long-term symptomatic and post-COVID-19 syndrome have not been sufficiently studied.

**OBJECTIVE.** To evaluate the variants of the post-COVID syndrome course depending on age, gender, comorbidity and severity course of coronavirus disease (COVID-19).

DOI: 10.32902/2663-0338-2023-1-14-19

14 | 1–2023

INFUSION & CHEMOTHERAPY

**MATERIALS AND METHODS.** The following research methods were used: electronic questionnaire, epidemiological, clinical and anamnestic, analytical and statistical methods. The study included 214 adult patients infected with SARS-CoV-2 virus (diagnosis was confirmed by polymerase chain reaction) and suffering from COVID-19 of varying severity. The patients were randomized into two groups: the main group included 112 people (63 men – 56.4 % and 49 women – 47.5 %); the comparison group included 102 patients with mild and moderate severity of COVID-19 who were consulted and treated outpatiently (46 men – 45.5 % and 56 women – 54.5 %). Statistical data processing was carried out using the IBM SPSS Statistics v26.0 program.

**RESULTS AND DISCUSSION.** It was found that among inpatients, there was a significantly higher number of patients over 60 years of age ( $p < 0.001$ ), whereas among outpatients, people aged 18-29 years prevailed. This indicates the relationship between the age of the respondents and the need for inpatient treatment in case of COVID-19. In the main group, the following symptoms occurred more frequently ( $p < 0.05$ ): cough (odds ratio, OR 2.023; confidence interval, CI 1.105-3.703), fever (OR 6.916; CI 2.061-23.204), shortness of breath – dyspnea (OR 4.421; CI 2.230-8.764). In the comparison group, the following prevailed: loss of smell (OR 0.147; CI 0.077-0.281), fatigue (OR 0.456; CI 0.226-0.920), increased body temperature (OR 2.023; CI 2.061-23.204). In patients who were admitted to the hospital, the following comorbidities prevailed: coronary heart disease (OR 33.088; CI 9.444-115.930), arterial hypertension (OR 13.641; CI 6.547-28.422), diabetes mellitus (OR 4.755; CI 1.915-11.803), heart failure (OR 18.504; CI 8.200-41.752), obesity (OR 4.828; CI 2.433-9.581).

**CONCLUSIONS.** 1. Among the patients who were admitted to the hospital, the vast majority are people over 40 years of age; men of a younger age (from 40 years) prevailed in contrast to women (over 60 years). 2. In persons with severe COVID-19, shortness of breath, cough, difficulty breathing, chest pain were registered more often. On outpatient treatment, loss of smell and fatigue prevailed. 3. In patients admitted to the hospital, the following comorbidities prevailed: coronary heart disease (37.5 %), arterial hypertension (57.4 %), diabetes mellitus (21.3 %), heart failure (54.1 %), obesity (41.1 %). Smoking and alcohol abuse did not show significant reliable differences. 4. The most common combination of three pathologies (hypertension, heart failure, obesity) was found in 11 people (10 %).

**KEY WORDS:** post-COVID syndrome, COVID-19, comorbidity, gender, age.