Covid-19 Pandemic: Another Lesson Learned by a Military Hospital

Authors : Mariana Floria, Elena-Diana Năfureanu, Diana-Mihaela Gălățanu, Anca-Ecaterina Grumeza, Cristina Gorea-Bocîncă, Diana-Elena Iov, Aurelian-Corneliu Moraru, Dragoș-Marian Popescu

Abstract: SARS-CoV-2 is the most deadly and devastating virus of the last one hundred years, being more highly contagious than EBOLA, HIV, Swine Influenza, Severe Acute Respiratory Syndrome, or Middle Eastern Respiratory Syndrome. After two years of pandemic, planning and budgeting for use of healthcare resources and services is very important. The aim of this study was to analyze the costs for hospital stay in patients with predominantly moderate forms of COVID-19 in a support military hospital located in Nord-East of Romania. Inpatient COVID-19 hospitalizations costs, regardless of ICD-10 procedure codes (DRG payment), in a Covid-19 support military hospital were analyzed. From August 2020 through June 2021, 241 patientswere hospitalized. Our national protocol for the treatment of Covid-19 infection was applied. The main COVID-19 manifestations were: 69% respiratory (18% with severe pneumonia, 2.9% with pulmonary embolism, diagnosed by angiocomputed tomography), 3.3% cardiac, 28% digestive, and 33% psychiatric (most common anxiety) manifestations. According to COVID-19 severity, most of the patients had moderate (104 patients - 43%) and severe (50 patients - 21%) forms. Seven patients with severe form died because of multiple comorbidities, and 30 patients were transferred in hospitals with COVID-19 intensive care units. Only two patients have had procalcitonin>10 ng/mL (high probability of severe sepsis or septic shock), and 1 patient had moderate risk for septic shock (0.5 - 2 ng/mL). The average estimated costs were about 3000€/patient, without significantly differences depending on disease severity. Equipment costs were 2 times higher than for drugs and 4 times than for laboratory tests. In a Covid-19 support military hospital that took care for predominantly moderate forms of COVID-19, the costs for equipment were much higher than that for treatment. Therefore, new criteria for hospitalization of these forms of COVID-19 deserve to be analyzed to avoid useless costs.

Keywords: Covid-19, costs, hospital stay, military hospital

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