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The medical rescue system in Poland in the era of the SARS-CoV-2 pandemic

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To the Editor:

The SARS-CoV-2 pandemic was first identified in December 2019 in Wuhan, China. Since then, the virus has spread all over the world, including Poland [1, 2].

A very important aspect of the fight against coronavirus is the emergency medical system, which concerns pre-hospital care. As part of the State Medical Emergency System, in 2020 there were 1,585 medical rescue teams in Poland (73% were basic teams, without a doctor) and 21 air medical rescue teams.

In the period before the pandemic, emergency medical teams intervened approximately 3.4 million times each year. The most common life-threatening conditions are sudden cardiac arrest, chest pain, shortness of breath, injuries, traffic accidents, suspected stroke. The period of the ongoing pandemic changed the functioning of the emergency medical system.

Retrospective analysis of departure order cards and medical rescue cards from 15/03 to 15/05 in 2018–2020, showed a large decrease not only in interventions but also in individual disease symptoms. The data was prepared thanks to the Command Support System of the State Medical Rescue with the participation of the Ministry of Health. In 2018, 550,815 interventions of medical rescue teams were recorded, in 2019 – 527,837, but already in 2020, during the SARS-CoV-2 pandemic, already 400,878 ($p < 0.001$). This is a drop in quantity by more than 20%. Due to

the reduced traffic on the roads, there was a decrease in traffic accidents by almost 50% and injuries by over 30%, and reasons for calling “fainting” by over 40%. The call for chest pain decreased by more than 15%, for breathing disorders (dyspnoea) by almost 20%. Only the call to suspect a stroke in the analysed period is at a similar level. The interventions for sudden cardiac arrest increased (by 5–10%) [3].

We read the article by Gąsior et al. [4] with great interest. Where the analysis occurred of the medical rescue system data concerned departure order cards and emergency medical cards in the period from 11/03 to 26/04 in the years 2019–2020. In the analysed voivodeships, by April 26, 2020, 2,599 infections were found – the most in the Śląskie Voivodeship – 1,867 people, in the Opolskie and Podlaskie voivodeships 363 and 369 infections, respectively. In all voivodeships, a decrease in the number of calls of emergency medical teams due to chest pain was observed, by an average of 8.3%. The number of diagnoses of a heart attack made by the head of the emergency medical team decreased by 22.3%. The number of hospitalizations due to myocardial infarction decreased by an average of 43.6%.

The occurrence of the common causes of intervention by emergency medical teams, e.g., chest pain, injuries, fainting, suspected myocardial infarction significantly decreases in the COVID-19 era and similar trends were observed in Poland and other countries [5, 6].

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