INVITED COMMENTARY / КОМЕНТАР ПО ПОЗИВУ

The distinctive conditions of cardiopulmonary resuscitation on commercial flights

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The article titled "Is there a doctor on the plane? The distinctive conditions of cardiopulmonary resuscitation on commercial flights" represents an extremely interesting and systematic review of measures and procedures for dealing with emergency situations, especially in performing cardiopulmonary resuscitation during commercial flights [1]. Each medical worker has probably considered the possibility of being responsible in case one of the passengers doesn't feel well or even experiences acute heart arrest. A responsible medical worker before reading this article would have a dilemma if he would even be able to deal with this specific situation, with many difficult aspects: tight airplane space, high altitude, absence of any previous information about the patient's health condition, his/her chronic diseases, habits, possible medicines he or she uses, information on the equipment for basic and advanced lifesaving measures - cardiopulmonary resuscitation (CPR) - in an airplane, and cabin crew training. This situation grows in complexity when one adds other problem, such as the absence of national and international guidelines for reacting in situations of this nature.

As stated in the article, European Resuscitation Council in its latest recommendations, issued in October 2015, proposed guidelines for performing CPR on an airplane. Knowing these guidelines can resolve many dilemmas medical workers may have on commercial flights – from reporting to crew as being able to provide professional help, familiarizing with available equipment, educating cabin crew in performing CPR, to medical recommendations and pilot decisions to land the plane in order to have professional consultations with medical teams on the ground [2].

However, international standardization in terms of equipment and medicines necessary for providing emergency help on an airplane hasn't been established yet, which is also true regarding the obligations of a passenger who also happens to be a medical professional. In the United States, each plane on a commercial flight with more than 12 seats must have CPR equipment. European countries do not have common regulations regarding the equipment; regulations vary from one country to another, and also depend on internal airline procedures.

An interesting fact stated in the article is that in the United States, Canada, and Great Britain, passengers who are medical doctors are not legally obligated to answer a cabin crew's call for help and provide medical assistance. However, in the European Union and Australia, a doctor has the legal obligation to provide emergency help to passengers in life-treating situations [3].

In Serbia, there is the Rulebook on Public Air Transportation and Noncommercial Flights, as well as the Code of Professional Ethics of the Serbian Medical Chamber, also mentioned by the authors, and these documents offer some procedural guidelines in situations of this nature.

The inexistence of standardized protocols, international regulations, and central records greatly complicates the review of and access to data about providing first aid on commercial flights. Consequently, the frequency of these accidents is very hard to establish, thus making epidemiological research covering this topic difficult. Available professional literature shows particular cases of performing CPR on commercial flights. Unfortunately, more often than not, this kind of information is received through newspapers and other media, without any expert explanations. When I received this paper for review, an intensely dramatic event was unfolding in the sky over Belgrade, when one passenger (who has had first aid training) succeeded in reanimating another passenger who had an in-flight cardiac arrest. The airplane subsequently landed on the Belgrade airport and ambulance physicians and physicians from the Emergency Department of the Clinical Center of Serbia were successful in further procedures aimed at saving the patient's life; the

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patient left the hospital five days later, fully recovered and without any neurological damage [4].

I have read the article "Is there a doctor on the plane? The distinctive conditions of cardiopulmonary resuscitation on commercial flights" in one breath because it gives great inspiration as well as clear and illustrative explanations, practical advice, and professional information about how to behave in these specific situations, thus demonstrating an important role and responsibility of doctors on planes in helping the pilot in critical situations to reach

REFERENCES

- Pavlović A, Trpković S, Anđelić S, Videnović N. Is there a doctor on the plane? The distinctive conditions of cardiopulmonary resuscitation on commercial flights. Srp Arh Celok Lek. 2017; 146(1-2):90–4.
- 2. Truhlar A, Deakin D, Soar J, Khalifa A, Alfonzo A, Bierens J, et al. European Resuscitation Council. Guidelines for Resuscitation 2015.

the decision on whether to land the plane or continue the flight. The paper could serve as the basis for creating national guides in this area. Multiple national guides could also establish common (international) guides, which would completely resolve all medical, ethical, and legal dilemmas of physicians as airplane passengers.

I must express my gratitude to the authors of this paper on excellent handling of this interesting topic of vital importance, in the hope that it will inspire further research and reflections.

Section 4. Cardiac arrest in special circumstances. Resuscitation 2015; 95:148–201.

- 3. Ruskin KJ, Hernandez KA, Barash PG. Management of in-flight medical emergencies. Anesthesiology. 2008; 108:749–55.
- 4. [Drama over Belgrade A man with an in-flight cardiac arrest reanimated 50 times.] Blic. 2017, April 14. (Serbian)