

## **Abstract**

This master's thesis topic is Gaspings – a promising prognostic marker during resuscitation. Its main aim is to prove gasping to be a promising prognostic marker during resuscitation. A partial objective is to show that a timely arrival of Emergency Medical Service to a cardiac arrest (with gasping) is going to affect the prognosis positively. Last but not least, this thesis is to prove that the initiation of the basic resuscitation at a cardiac arrest with gasping is going to affect the result of CPR (cardiopulmonary resuscitation) positively.

In the theoretical part, there is a description of breathing, gasping, cardiac arrest and resuscitation. The resuscitation is further divided into basic and advanced life support but also post-resuscitation care guidelines.

The practical part is based on the statistical data analysis from the years 2019 and 2020. The data was provided by the Emergency Medical Service of the Central Bohemian Region. The research includes 795 suitable respondents at whose acute circulatory failure gasping or apnoea appeared. The empirical part is processed with descriptive data analysis, contingency tables and chi-square test of independence. The statistical significance is at a level of 5%.

The statistical research proves gasping to be a positive prognostic marker during resuscitation. It eventuated from the collected data that there is a certain correlation between the examined attributes. Gasping and apnoea (at a cardiac arrest) were compared at the statistical survey. In the presence of gasping at a case of acute circulatory failure there is a 41 % chance of survival. In case of apnoea there is a 10,4 % survival rate. The rest of the results are interpreted in the empirical part.