

## **ABSTRACT**

Ensuring the bloodstream is one of the most frequently indicated invasive procedures, especially in the pre-hospital emergency and intensive care. All invasive inputs are nowadays an integral part of intensive care. Despite careful daily care, vascular accesses are at risk of complications, which annually affects many patients institutionalized at intensive care units. Catheter sepsis is undoubtedly one of the most serious. Although a significant proportion of these infections are considered highly preventable, they still contribute to high morbidity and mortality among these patients.

The aim of this diploma thesis is to analyse nursing care for vascular inputs. One of the partial goals is to evaluate and compare the relevance of the nursing standard of a medical facility with scientific knowledge and current recommendations of professional societies. The research method is a quantitative questionnaire survey focused on nursing staff working in the Department of Anesthesiology and Reanimation. The analysis of the vascular inputs re-dressings was performed in patients hospitalized in the same ward, where the research itself took place.

The results of the research survey show a discrepancy between the given procedure in the nursing standard and common practice in the ward. In view of the recommendations of professional societies, the nursing standard contains significant inconsistencies in the way vascular inputs are cared for. During the research investigation, a tenth of the patients were found to have a proven bloodstream infection. I consider unnecessary re-dressings after 12 hours, which are performed by almost 18% of nursing staff, to be one of the triggering factors. In almost 4 % of the central venous catheter re-dressings, the entrance was treated without the use of disinfectant. The absence of chlorhexidine disinfection is also a significant risk factor for bloodstream infection. Based on the results of the research, a proposal was made to update the nursing standard as follows: Nursing care for vascular inputs based on the recommendations of professional societies.

**keywords:** intravascular catheter, central venous catheter, healthcare associated infection, bloodstream infection, catheter-related bloodstream infection