

SUMMARY

Introduction: Determining the workload of nurses is important issue for both managers of the health care system, which operates on many levels of social structures and for nurses. Thanks to scientific research on the workload of nurses, it has been proven that the employer can improve the quality of care in their institution by proper organization of work, but on the other hand, research shows that nursing generates high costs of patient care, because this is one of the most numerous professional group who work in the hospital.

Method: The aim of the study was to compare the workload of nurses in patients after cardiac surgery with minimal access, anesthesia standard and according to the ERAS protocol. The patients qualified for the study were selected alternately - one patient was qualified for ERAS anesthesia and the next one for standard anesthesia.

Results: According to the results of own research, it was shown that the workload in the group of cardiac patients anesthetized with the ERAS protocol was lower. According to the NEMS scale, an important alternatively the workload on subsequent daily rosters was 50.3, 32.0, 27.4 points and 54.1, 38.8, 40.3 under ERAS and standard anesthesia respectively. In accordance with the NEMS scale, the workload on subsequent night rosters was 34.9, 26.0, 23.7 under ERAS and standard anesthesia respectively. These results were statistically significant.

According to the NAS scale, the workload on subsequent daily rosters was 67.5, 48.6, 46.8 points and 106.5, 74.5, 62.9 points under ERAS and standard anesthesia respectively.

According to the NAS scale, the workload the workload on subsequent night rosters was 97.5, 65.4, 61.2 points under ERAS and standard anesthesia respectively.

The ERAS protocol had no negative impact on patient safety. The average length of stay of patients anesthetized by the ERAS and standard protocol was 24.1 and 55 hours respectively. The average ventilation time for patients who were anesthetized by the ERAS protocol was as follows: 216 minutes and 626.2 minutes, respectively. The mean transfusions in ERAS and anesthetized patients were respectively: 0.04 units and 0.72 units. The average plasma transfusions were 0.24 units in standard anesthetized patients, while ERAS patients did not have such transfusions. The average drainage in ERAS and anesthetized patients was as follows: 309.6 ml and 540.6 ml, respectively. Non-invasive mechanical ventilation was necessary in 12% of standard anesthetized patients. In ERAS patients, a CPAP mask was not necessary. Pressure ulcers occurred in 9% of standard anesthetized patients, but they did not

appear in the ERAS group. Re-intubation took place in 6% of standard anesthesia patients. In ERAS patients, this was not necessary. Reoperation for bleeding was reported in 6% of patients who were anesthetized as standard. There was no need for revision in the ERAS group.

Conclusions: The research carried out in the Department of Cardiac Surgery Intensive Care in Rzeszow, showed that the workload of nurses is reduced in case of the Enhanced Recovery After Surgery (ERAS) protocol in patients after mitral valve surgery with minimal access. The use of anesthesia in accordance to the ERAS protocol is beneficial at every stage of perioperative care in cardiac surgery patients. In addition, the ERAS protocol has been shown to have positive effect on patient safety.