



ANALYSIS OF THE WORK OF THE ANESTHESIA NURSE AND ANESTHESIA TECHNICIAN IN THE ANESTHESIOLOGY DEPARTMENT

Adilova Z.U.

Abdashimov Z.B.

Ibrohimova M.S.

Department of the School of Public Health,
Tashkent State Medical University

<https://doi.org/10.5281/zenodo.17870387>

ARTICLE INFO

Received: 07th December 2025

Accepted: 08th December 2025

Online: 09th December 2025

KEYWORDS

In European countries, the organization of anesthesiology services and the role of anesthesia technicians are based on many years of scientific research and practical experience

ABSTRACT

In modern medicine, the field of anesthesiology is considered an integral part of surgical practice. The success of any surgical procedure depends not only on the anesthesiologist but also directly on the qualified and responsible work of the anesthesia technician. In the anesthesiology department, the anesthesia technician ensures that anesthesia machines, monitors, oxygen systems, syringe pumps, and other medical equipment are functioning properly, clean, and ready for use. (The Anesthesia Technician and Technologist's Manual, Glenn Woodworth, Jeffrey R. Kirch, Shannon Sayers-Rana, 2024)..

In modern medicine, the field of anesthesiology is considered an integral part of surgical practice. The success of any surgical procedure depends not only on the anesthesiologist but also directly on the qualified and responsible work of the anesthesia technician. In the anesthesiology department, the anesthesia technician ensures that anesthesia machines, monitors, oxygen systems, syringe pumps, and other medical equipment are functioning properly, clean, and ready for use. (The Anesthesia Technician and Technologist's Manual, Glenn Woodworth, Jeffrey R. Kirch, Shannon Sayers-Rana, 2024).

In European countries, the organization of anesthesiology services and the role of anesthesia technicians are based on many years of scientific research and practical experience. The position, duties, and professional qualifications of anesthesia technicians in anesthesiology departments have been defined according to international standards, and a professional competency model has been developed.

In this field, a number of scientific studies have been carried out by the Ministry of Health of the Republic of Uzbekistan, the Academy of Medical Sciences, as well as scholars from the Tashkent Medical Academy and medical colleges (Prof. M.R. Fayziyev, Assoc. Prof. D.X. O'razbayeva, Assoc. Prof. S.X. Abdullayeva).

Purpose of the study:

To analyze, assess, and organize the work of anesthesia nurses and anesthesia technicians working in anesthesiology departments.

Research methods:

An analytical approach was used based on the review of literature sources. Various scientific publications were collected and analyzed.

Research results:**Anesthesia Nurse**

In addition to standard nursing duties, an anesthesia nurse performs broader clinical tasks in the field of anesthesia. These include preoperative nursing assessment of the patient, preparation and administration of medications planned by the anesthesiologist, and playing an active role in anesthesia induction (sedation stage). Within the scope of nursing practice, the anesthesia nurse evaluates the patient's vital signs during surgery. Postoperatively, the nurse provides care related to pain management, nausea and vomiting, and monitors the patient in the recovery and postoperative rooms. The anesthesia nurse has both technical and clinical care responsibilities and possesses broader competencies than the anesthesia technician.

Anesthesia Technician

The anesthesia technician performs technical procedures before, during, and after surgery in cooperation with the anesthesiologist and anesthesia nurse. Their duties include checking anesthesia equipment used in the operating room, preparing monitors, ventilators, and infusion pumps, assisting in preparing the patient for surgery (positioning, connecting monitors), and preparing medications under the guidance of the anesthesiologist. During surgery, the technician monitors the functioning of equipment that displays the patient's vital signs. After surgery, the technician helps transfer the patient to the postoperative unit. They are also responsible for cleaning machine logs, providing technical maintenance, and ensuring proper storage of equipment.

Conclusion:

The results of the study show that the proper organization of the work of anesthesia technicians in the anesthesiology department ensures technical and practical support before, during, and after surgery, enabling smooth and safe functioning of the operating room. These duties require great responsibility and diligence, and their contribution plays an essential role in ensuring patient safety. Effective technical support also allows anesthesiologists to dedicate more time to clinical decision-making.

References:

1. Banerjee S, Askin N. Anesthesia Care Provided by Nurses [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2021 Sep. PMID: 36327357. <https://pubmed.ncbi.nlm.nih.gov/36327357/>
2. Pann KJ, Buchner VK, Eßl-Maurer R, Bacher T, Glarcher M, Ewers A. International competencies of nurses with advanced practice in anesthesia nursing: An integrative review. *Int J Nurs Stud Adv.* 2025 Mar 17;8:100319. doi: 10.1016/j.ijnsa.2025.100319. PMID: 40212814; PMCID: PMC11984995. <https://pubmed.ncbi.nlm.nih.gov/40212814/>