


**Review Article**

## Psychological Aspects of Working as an Anesthesiologist

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### Abstract

**Introduction:** The anesthesiologist is a representative of the specialty exposed to severe professional stress occurring in every field of his activity. They are reported to have higher rates of burnout compared with other specialists.

**Aim:** The aim of this paper is to discuss the psychological aspects of working as an anaesthesiologist.

**Material and methods:** This work is based on the authors' experience and available literature.

**Results and discussion:** In the profession of anaesthesiologist not only the manual skills but above all the psychological resistance to stress is very important. The anaesthesiologist must act quickly, but in a thoughtful manner, because each decision can have enormous consequences. Resilience and teamwork combined with decisiveness should distinguish a good anaesthesiologist. Even experienced anaesthesiologists can experience tremendous stress in a sudden critical situation, therefore, simulation of adverse effects and development of appropriate habits are of great importance. The following article highlights the important aspects of anaesthetic practice, not only to reduce stress but also to increase safety during patient anaesthesia.

**Conclusion:** Stress resistance is the most important quality of an anesthesiologist. Moreover, active listening, critical thinking, sound judgment, and decision-making are also crucial.

**Keywords:** Anaesthesiology; Stress; Preventing; Soft- skills; Communication; Psychological aspects

### Introduction

In high-risk industries, such as aviation or anaesthesiology, skills not directly related to technical knowledge but crucial for maintaining safety (e.g. teamwork) are classified as non-technical or soft skills. During the training of future specialists in Anesthesiology and Intensive Care, the main emphasis is placed on teaching anaesthesia techniques and other practical skills. However, in our opinion, the soft skills required for this job should not be forgotten, as well as the psychological aspects of being an anesthesiologist. Many studies show that the majority of anaesthesiologists struggle with professional burnout, anxiety, or depression [1]. In our paper, we will try to outline the most important psychological characteristics of being a good anesthesiologist. Critical incident reports and observational studies have identified nontechnical skills that are essential for effective anaesthesia crisis management. Examples of such skills include task management, teamwork, situation awareness, and decision making. These skills are not always acquired

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through clinical experience and may require special teaching. For this reason, many medical universities in Poland have begun to include medical communication classes in their program. This is because it has been recognized that practical skills in many cases are not sufficient to provide the best possible patient care [2,3]. Human resource development, especially the training of problem-solving and teamwork skills, is essential in high-risk environments. Staff must be able to deal with infrequent but dangerous events. Training should be domain-specific and based on an analysis of the skills required. Anesthesiologists work in complex environments under stress: dynamic decision-making and uncertainty. Problem-solving in operating rooms requires cognitive and interpersonal skills in addition to technical skills.

## Discussion

The numbers are impressive: an Indian-American study indicates that an anesthesiologist can administer up to half a million different medications during his career. Thus, it is statistically likely that an error of some form will occur sooner or later [4]. According to the Australian Incident Monitoring Study published in 1993, the most common factors identified as contributing to incidents were misjudgment (16%), failure to inspect equipment (13%), medical malpractice, equipment problems, inattention, haste, inexperience, and communication problems [5]. Therefore, in our opinion, the anesthesiologist, in addition to the technical and practical knowledge, should have several personality and character traits that facilitate this difficult and stressful work.

The anesthesiologist is a representative of the specialty exposed to experiencing strong professional stressors in all areas of his activity. The most stressful moment among the activities performed by anaesthetists during induction of anaesthesia was intubation, which was confirmed by a sharp increase in heart rate, statistically significantly in young anaesthetists just beginning their adventure in anaesthesiology [6]. Therefore, an anesthesiologist should be distinguished by mental resilience to stress and be able to work under stressful conditions. The concept of emotional intelligence was introduced to psychology by Daniel Goleman. Emotional intelligence is a set of traits, and various types of abilities such as the ability to motivate and persist in the pursuit of a goal despite setbacks, the ability to control urges and postpone their gratification, regulate mood and not give in to worries that impair the ability to think, empathize with the moods of others and look to the future with optimism. It is the ability to cope with stress, to effectively control emotions and moods such as fear, anger, depression, the ability to motivate oneself in a changing emotional environment, and the ability to motivate others. Emotional intelligence frequently becomes usable in a physician's bedside manner and can affect patient satisfaction and compliance.

Communication and emotional competence are

increasingly recognized as essential components of the reliable and appropriate practice of medicine. In recent decades, there has been an effort to introduce into training curricula classes aimed at developing and improving these skills. The specialists dealing with psychological aspects of physicians' work indicate the need for specific inter- and intrapersonal resources among people working in the Intensive Care Unit. Researchers emphasize the need to cope with heavy psychological loads and communication challenges characteristic of this specialty. Establishing contact with the patient is one of the most important tasks of the physician. Professional communication between the physician and the patient and family enhances, and sometimes even enables, the effectiveness of treatment. Scientific reports also confirm the positive impact of good communication on patients' health [7]. Communicating unfavourable information is another skill that anesthesiology physicians in particular should master, as they are the ones who will encounter this situation most often. Understanding the patient's emotional state and point of view, and ability to communicate this can be crucial in these circumstances. On the other hand, it is not only communication with the patient or family that is crucial in the work of an anesthesiologist. To ensure the best patient care, it is also worth focusing on communication within the team, with all medical staff. It is important to discuss cases together, especially failures, to prevent their occurrence in the future.

Another crucial skill is situational awareness. It can be defined as the perception of reality and events in relation to time and space and the meaning of those events and their consequences. It is one of the soft and long-term skills - above all, very difficult to assess and measure. This concept touches the realm of evaluating events in the context of the need for us to take appropriate action. It is nothing else than tactical thinking, which refers to putting ourselves in a comfortable position in relation to the reality around us. Situational awareness can be divided into three components: perception, comparison, and prediction. Perception is the ability to make current judgments. Comparison is the ability to relate current reality to our experiences or our training. Anticipation is the element in which we position ourselves as to future steps. A British study found that a distracting event occurs on average every 4 minutes. Specifically, during induction and transfer to the operating room, one event every 3 minutes, one event every 2 minutes was observed during awakening, and during the maintenance phase, it was one event every 6.5 minutes. Twenty-two percent of events were considered to have negative consequences for the patient, including worsening of physiological parameters, delaying procedures, or preventing smooth induction of anaesthesia [8]. Therefore, the anesthesiologist must pay great attention to detail, re-examining the situation and patient parameters every now and then. Consequently, one of the most useful skills in the work of an anesthesiologist is the ability to focus and be consistent.

Being an anaesthesiologist requires demonstrating confidence repeatedly. This is why self-confidence is often identified as a key trait of a great physician. The best way to gain confidence is by putting yourself outside of your comfort zone as often as possible i.e. by practicing. Therefore, the anaesthesiologist should always be prepared for complications and have good management habits. Regular simulations reduce the level of stress during real problems. Another aspect we cannot forget is dealing with failed procedures, self-criticism, and proper evaluation of our abilities.

## Conclusion

In our opinion, the most important qualities of a good anaesthesiologist include diligence, accuracy, concentration, responsibility, the ability to "find oneself" in situations that took us by surprise - often unforeseen, the ability to make quick decisions, react quickly and anticipate, and of course empathy.

Good habits in an anaesthesiologist's work:

1. Always pay attention to details.
2. Be empathetic.
3. Prepare adequately and without haste for the case.
4. Check the patient's details and the procedure to be performed.
5. Personally examine the patient to check the airway and possible allergies.
6. Check ventilator and medications.
7. Always have a plan B.
8. Never leave an anesthetized patient unattended.
9. If there is a problem, ask for help.
10. Do not panic, follow ABCDE.

## Conflict of interest

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## Data availability statement

All data generated or analysed during this study are included in this published article (and its supplementary information files).

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