

The Teaching Experience of Clinical Practice for Undergraduates Majoring in Anesthesiology

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Abstract: *Anesthesiology is an important discipline in medical science, which is of great significance to the cultivation of clinicians. However, in the process of clinical practice and teaching for anesthesiology undergraduates, there will be many problems. In order to solve the existing problems, the teaching doctors constantly explore solutions in practice. In this paper, we will make a brief review of the relevant literature of clinical practice for anesthesiology undergraduates in recent years, hoping to help anesthesiology undergraduates to receive higher quality teaching in clinical practice.*

Keywords: *anesthesiology; undergraduate; clinical practice*

1. Introduction

It is very important for anesthesiology undergraduates to study in clinical practice. Anesthesiology is a major involving life safety, which needs the support of professional knowledge and operational skills. Therefore, in the process of clinical practice can improve students' professional level, also help to ensure safety of patients^[1]. This paper will review the recent studies on clinical teaching practice in anesthesiology.

2. The Importance of Clinical Teaching in Anesthesia Specialty

First of all, teaching anesthesiology undergraduates in clinical practice can deepen their understanding of anesthesia knowledge and master anesthesia operation skills. In the way, students can not only observe the evaluation and monitoring of patients, but also participate in some simple anesthesia operations to deepen their understanding and skills of anesthesia operation through repeated practice, which is not only conducive to the improvement of students' professional skills, but also conducive to students' future career development^[2].

Secondly, anesthesiology undergraduates in clinical practice is also helpful to enhance students' sense of responsibility and awareness. In the process of anesthesia, anesthesiologists need to be responsible for the life safety of patients. Therefore, students will also have a high sense of awareness and responsibility for the life safety of patients during the internship. Students can better understand their responsibilities and learn how to protect their patients at work.

Finally, in clinical practice helps students to improve their communication skills and teamwork skills. During the anesthesia process, the anesthesiologist needs to communicate and cooperate well with other members in the operating room to ensure the quality of anesthesia and patient safety. Therefore, clinical practice can allow students to experience collaboration exercise their teamwork and communication skills, and lay a solid foundation for their future career development.

To sum up, it is very important and necessary for undergraduates to teach in clinical practice, which is not only useful for the improvement of students' professional skills, but also conducive to ensuring the safety of patients. Schools should strengthen the clinical practice education for students majoring in anesthesiology, and strengthen the guidance and teaching in practice, so that they can better master professional skills and ideas, and lay a solid foundation for their future career development.

3. The Specific Way of Clinical Teaching

Effective teaching in clinical practice can improve students' independent learning and professional level, and lay a solid foundation for their future job development. Here are several effective ways to teach them. First of all, to make a detailed internship plan^[3]. Before the internship begins, a detailed internship plan should be formulated to clarify the goals and requirements. This plan should include internship time, task assignment, practical operation, and knowledge learning, so as to help students to grasp the key and difficult points.

First of all, formulation and implementation of internship teaching plan

Before the teaching begins, the teaching doctor should develop a detailed internship plan [3]. Before the internship begins, a detailed internship plan should be developed, clarifying the goals and requirements of each internship cycle. This plan should include internship time, task assignment, practical operation, and knowledge point learning to help students grasp the key points and difficulties well.

When developing a plan, it is first necessary to analyze the teaching goals and tasks. Undergraduates majoring in anesthesiology need to master the necessary anesthesia skills and theoretical knowledge through clinical internships, and cultivate good professional literacy and teamwork ability. Therefore, the goal of the teaching program should be to improve students' clinical practice ability so that they can perform common anesthesia procedures independently; Develop students' problem-solving skills and ability to respond to emergencies; Develop students' observation skills and teamwork spirit.

Stage 1: Pre-internship preparation. Introduce students to the objectives, methods, and requirements of clinical placements; Distribution of practice manuals, including relevant theoretical knowledge and practical skills in anaesthesia; Provide students with pre-internship preview materials, including procedures for disease diagnosis and management, manuals, demonstration videos, etc.

Stage 2: Teaching during the internship process. Students conduct simulation training before practicing the operation, such as using virtual reality technology to simulate anesthesia surgery; Lead students to participate in real anesthesia surgery, observe and record the patient's condition changes, anesthesia drug use and side effects, etc.; Guide students to analyze problems and difficulties in surgery, and provide solutions and practical guidance; Cultivate students' observation skills and teamwork spirit, and encourage students to actively communicate and interact with team members; Organize thematic discussions regularly for students to share and summarize practical experience, learn from each other and learn from each other.

Stage 3: Post-internship summary and evaluation. The instructor instructs students to write internship reports, including details of the anesthesia surgeries involved and their own reflections; Conduct an assessment of the results of the internship, including the mastery of theoretical knowledge, the accuracy of practical operation and the ability to respond to unexpected situations; Encourage students to suggest improvements. After the teaching plan is formulated, it needs to be implemented and evaluated in a timely manner. In the implementation, the method of group guidance of teaching teachers is usually adopted, and according to the level of students and internship time, they are divided into different groups for teaching. In practice, students are arranged to participate in real anesthesia surgery, and the instructor will guide and comment. Organize regular group discussions where students share experiences and interact; The evaluation methods are divided into internship results, internship report evaluation, student self-evaluation and discussion and exchange evaluation. Internship achievement evaluation refers to the evaluation of students' internship results through observation and evaluation of students' practical operations; Internship Report Evaluation: A student's internship report is evaluated, including the completeness of the content and the depth of thought. In addition to leading the teacher to evaluate the students, students should be encouraged to self-evaluate their own performance, so that students can identify problems and propose improvement plans. In order to prevent students from not actively participating in thinking, discussion and communication are also included in the scope of assessment, that is, students' teamwork ability is assessed through discussion of student performance and interaction in communication. Improvements to the teaching plan and plan for their future development.

Secondly, to provide sufficient internship opportunities. Students need to gradually master the anesthesia skills in the practical operation. Practice is the core part of anesthesia, so the teacher should give students points of practice machine, let them constantly hold anesthesia operation skills. For

relatively simple operations, it can be demonstrated by students; for more complex operations, the teacher need give guidance nearby to create a safe and harmonious environment. To strengthen the communication and interaction. Teachers should build a good communication mechanism with students, listen to students' feed, and help them to solve problems and difficulties. In the practical operation and knowledge learning, the teacher should actively interact with students, lead students to actively think and explore problems, so as to improve students' independent learning ability.

We should also pay attention to student evaluation and motivation in teaching. Teachers need to give evaluation and incentives according to students' performance to encourage students to follow up their efforts. In the process of internship, students can evaluate their practical operation and learning results by compiling evaluation forms and making regular reports. We can also point out the shortcomings of students in the evaluation and give reasonable suggestions and encouragement, so as to promote them to continue to improve their professional level.

In the process of clinical practice of undergraduates majoring in anesthesiology, sometimes there will be low interest in learning, and even some students' interest in this subject gradually decreases [4]. In order to solve this problem, the following ways can be adopted to enhance the learning interest of anesthesiology undergraduates. The teachers should enrich the internship content, the clinical practice content of anesthesiology major should be as rich as possible, so that students to contact and understand more clinical technology and knowledge. The teachers consider adding some anesthesia operation simulations for special procedures, or arranging some practical courses on operation and maintenance of anesthesia devices. In addition, students should participate in clinical case discussions to help them better understand and master various skills and knowledge of anesthesiology major, so as to improve their interest in learning. All of them pay attention to practical operation, the clinical practice of anesthesiology should focus on practical operation. Let the students personally participate in the anesthesia operation, enhance their experience and achievement of anesthesiology practice. In addition, the safety of the anesthesia operation process should be considered to ensure that students can complete the anesthesia operation independently under the guidance of a doctor. All these can make students better experience the practical operation and learn knowledge of anesthesiology, as well as to improve their interest in learning. Establishment of tutorial system, in the clinical practice process of anesthesiology undergraduates, the establishment of tutorial system is an effective way. Tutors can provide targeted guidance and suggestions and case analysis in related fields, according to the students' learning conditions and interests. The tutorial system can also solve students' problems in the process of learning and enhance students' confidence and interest. Provide a suitable learning environment, anesthesiology undergraduates need a suitable learning environment. Hospitals should provide advanced equipment and tools, as well as qualified practical operation sites. In order to improve students' interest, the hospital can also consider adding some publicity and educational resources, such as lectures, academic conferences, literature, etc., and encouraging students to participate in related discipline competitions to stimulate their interest. To establish an academic environment, anesthesiology is a strong interdisciplinary discipline, requiring a good academic environment. Schools can establish communication platforms in different fields, such as academic lectures, discipline exchange meetings, etc., to provide academic exchange opportunities for undergraduates. In addition, schools can also encourage students to participate in academic research and innovative practice to enhance students' interest in anesthesiology and their sense of achievement in learning. In short, the hospital, school and tutors need to improve the learning interest of anesthesiology undergraduates in clinical practice. We should pay attention to enrich the content of practice, pay attention to practical operation, establish the tutorial system, provide an appropriate learning environment and establish an academic environment, so that students can better experience and understand the knowledge and skills of anesthesiology, so as to improve their interest.

In conclusion, the effective teaching of anesthesiology undergraduates in clinical practice need to develop detailed internship plans, provide sufficient internship opportunities, strengthen communication and interaction, and focus on student evaluation and motivation. Only in this way can we help students to better master anesthesia skills and professional knowledge in practice, improve their independent learning and professional level, and lay a solid foundation for their future career development.

4. Notices for Professional Clinical Teaching

Hospital doctors need to teach students with special attention to ensure the smooth internship and mastery of professional knowledge.

First of all, ensure the safety of the interns. In the practice, The key to the anesthesia operation is safety. Therefore, physicians should ensure that the interns have sufficient safety awareness, strictly implement the relevant safety regulations, and check the operation in practice. Secondly, clarify the tasks and responsibilities of interns. Doctors should introduce the tasks and responsibilities of interns in detail, clarify the division of tasks and work process, and ensure that interns can clearly understand their work content and cooperation with other functional departments^[5]. Physicians provide sufficient learning opportunities. Physicians must ensure that interns are fully mastered and familiar with practical work and practical operation skills. To this end, providing suitable learning and practical opportunities to interns can constantly improve their professional skills in practice. Doctors should communicate with interns, listen to their difficulties and problems, and give guidance and suggestions. Interns are encouraged to ask questions boldly, actively think and explore solutions, and improve their independent learning ability. For appropriate evaluation, doctors should evaluate the work of interns and give feedback and suggestions so that interns can make improvements. According to the advantages and disadvantages of interns, to provide them with appropriate incentives and rewards and encourage them to work harder can improve their professional level. Doctors should strictly abide by the relevant laws and regulations formulated by the state and the hospital. In the internship, we should not only pay attention to the operation safety and practical skills, but also maintain good professional ethics, to set a good example, and demonstrate the interns to correctly and standardize the operation of anesthesia. In the process of teaching interns, doctors need to cultivate a good team spirit, let them understand the importance of the team, and form a good sense of teamwork during the internship^[6].

In short, hospital doctors need to ensure the smooth practice of interns and teach professional knowledge. Meanwhile, doctors should also play a good example, strictly abide by the relevant laws and regulations, and cultivate the team spirit of interns, so as to lay a solid foundation for students' future career development. In addition, with the development of medical technology and the continuous improvement of medical education, more and more hospitals have begun to implement a teaching system, and experienced doctors will guide the work of new doctors. However, for teaching doctors, how to balance their medical work and teaching tasks is a challenge.

First of all, the teaching doctor needs to clarify his identity and role. Teaching physicians are both medical experts and educators, and they need to switch and perform different roles in medical work and teaching tasks. In medical work, teaching doctors should be patient-centered and go all out to provide high-quality medical services; In the teaching task, they need to be student-centered and actively participate in the education and training of students. Clarifying one's role can help teaching doctors better grasp their proportions and responsibilities in medical work and teaching tasks. Second, proper time planning is the key to balancing medical work and teaching tasks. Teaching doctors usually have to take on both clinical work and participate in teaching tasks. Therefore, he needs to arrange his time scientifically and arrange the relationship between clinical work and teaching tasks reasonably. In terms of medical work, the teaching doctor can reasonably arrange the commuting time and duty time to ensure that he has enough time to devote to the patient's medical service; In terms of teaching tasks, teaching doctors can reasonably arrange teaching time and lecture time according to students' learning progress and needs to ensure that students can receive sufficient guidance and training. In addition, teaching doctors can also flexibly use a variety of teaching methods and methods to improve the teaching effect and reduce the burden. For example, teaching doctors can use modern teaching equipment and technology, such as teaching imaging, remote consultation, etc., to improve teaching effectiveness and reduce their own work burden. At the same time, teaching doctors can also actively advocate students' independent learning and problem-oriented learning, encourage them to actively participate in clinical work and ask questions, so as to reduce their workload in teaching tasks. In addition, hospitals should also provide necessary support and guarantees for teaching doctors. Hospitals can formulate clear teaching policies and systems, clarify the rights, responsibilities and remuneration of teaching doctors, and provide them with necessary teaching resources and equipment. At the same time, the hospital shall also arrange special teaching personnel or teaching teams to assist the teaching doctors in carrying out the teaching work, reduce their work burden, and ensure the smooth development of the teaching work. Finally, teaching doctors should pay attention to their own career development and learning improvement. Only by continuously improving their professional level and teaching ability can we better complete the teaching task and achieve a better balance between medical work and teaching task. Teaching doctors can actively participate in various teaching training and academic exchange activities, strengthen their teaching skills and teaching methods, and constantly enrich their knowledge reserves and teaching experience. At the same time, teaching doctors can also actively participate in scientific research activities and academic lectures, and continuously improve their professional level and academic achievements.

To sum up, to balance the relationship between medical work and teaching tasks, teaching doctors need to clarify their role positioning, reasonably plan time, flexibly use teaching methods and means, obtain the support and guarantee of hospitals, and pay attention to their own career development and learning improvement. Only with the efforts of many aspects can we better balance the relationship between medical work and teaching tasks, and promote the common development of medical undertakings and medical education.

5. Summary and Outlook

Improper anesthesia may cause a series of risks, mainly including inducing heart disease, inducing aspiration pneumonia, and side effects mainly including nausea and vomiting, allergies, etc. If you have a heart disease and you inject anesthesia without telling your doctor, it is easy to increase the risk of heart disease. If the patient is under general anesthesia, esophageal reflux may occur, which may affect normal breathing and increase the incidence of aspiration pneumonia. Anesthesiologists with rich experience and knowledge can reduce the incidence of such risks, and for inexperienced undergraduates, professional doctors need to be taught by professional doctors in clinical anesthesia to improve their own level.

Hospital doctors may encounter some common problems in the process of teaching anesthesiology professional interns. Teachers may find that some interns may not have enough basic knowledge of anesthesiology, and may have difficulties in practice. In order to solve this problem, doctors can first give some theoretical lectures to make the interns understand the concept and basic theories of anesthesiology, and provide some relevant reading materials. In addition, the doctors can also use the practical operation link to provide careful and patient guidance, so that the interns can better understand and master the various skills of anesthesiology. Anesthesia requires high attention to safety, and some interns may not have strong enough sense of safety in anesthesia. Therefore, doctors can give a detailed safety explanation before the operation, and ask the interns to read carefully and comply with the relevant operating specifications to encourage interns to actively participate in the operation, so that they can constantly improve their awareness of operation safety. Anesthesia operation requires agile response speed, and some interns may not respond fast enough. So doctors can choose some operation items that are easy to master and practice for training, and gradually improve the response speed of interns. In the operation process, doctors can also give interns targeted guidance to help them better perform anesthesia operation. Hospital is a place where a good teamwork environment is needed. Some interns may lack the sense of teamwork, leading to problems such as poor communication and in coordination with other medical staff. Doctors can pay attention to cultivating teamwork spirit in practice, asking interns and other medical staff to establish a good communication mechanism, timely exchange of work situation, and encourage interns to actively participate in team work, and learn to effectively cooperate with others to complete various work tasks. The existing teaching mechanism generally provides insufficient evaluation and feedback to interns. Evaluation and feedback are the key factors for interns' growth, but some doctors may not give insufficient comprehensive evaluation and insufficient feedback to interns. They should record the interns' performance in practice, and give constructive feedback to the interns' performance. In this way, interns can better understand their own strengths and weaknesses, and gradually improve their anesthesia operation skills in practice.

In a word, in the process of teaching anesthesiology professional interns, although we will encounter some problems, as long as the doctors teach with their clinical experience and professional knowledge, and pay attention to training and evaluation of professional skills, to better interns growth.

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