

Original Research Article

Research on Teaching Practice of General Surgery for International Students

Jie Liu*

Shenzhen Xinsha Aimin Hospital. E-mail: liujie@sina.com

Abstract: In general surgical practice, foreign students often neglect the ability to learn and operate. The reasons include defects in teaching system, insufficient practical ability, poor language communication, etc., which leads to the failure of foreign students to improve their surgical skills and poor teaching quality. As a result of the reform of teaching system and emphasis on practice, a high-level teaching team has been created, the quality of international students has been improved, and the practice quality has been gradually improved.

Keywords: Surgical teaching practice; Foreign students

With the continuous enhancement of China's comprehensive strength, medical education has been developed by a large number of overseas students who choose to study in China. With the dream of becoming a doctor, these students came to China for their studies and returning. With the continuous expansion of the scale of international students, there is still a long way to go to establish and improve the education system for international students, improve the teaching quality, and promote the development of China's university education to the world. However, the effect of foreign student education, especially practice teaching, is not ideal. Taking general surgery as an example, this paper analyzes the current situation of foreign students' practice, increases teaching experience and improves the quality of practice teaching.

1. Characteristics of general surgery

General surgical diseases are complicated, and acute and critical diseases are the largest surgical systems, involving spleen, liver, biliary tract, pancreas, gastrointestinal tract, blood vessels, thyroid gland, breast and other organs, including injuries, tumors, inflammation, peripheral vascular diseases and other diseases. The age difference of patients is quite large, ranging from newborns to the elderly. Elderly patients are often combined with chronic diseases such as hypertension, diabetes, heart disease, etc., and belong to high-risk groups, which need specific analysis and individualized treatment plan. Patients in emergency department of general surgery have rapid progress, great changes and serious illness, so they need correct diagnosis and treatment as early as possible. If treatment is not timely, patients may be life-threatening, but there are many abdominal organs, which are closely related, so it is very difficult to locate and diagnose.

Operation is the main method of general surgical treatment. The success of the operation not only determines whether the patient's pain can be relieved, but also determines the key index to evaluate the doctor's level. Ordinary surgery is difficult, and long-term qualified surgeons should have good surgical skills, from binding, cutting, suturing to tearing, matching, cleaning lymph nodes, placing drainage pipes, and cleaning pipes every time. In recent years, lapa-

Copyright © 2022 Jie Liu

doi: 10.18282/g.s.v2i1.1435

This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

roscopic surgery has been carried out through small test to examine and treat patients, with minor trauma, less bleeding during operation, lower frequency of surgical complications and better therapeutic effect. Therefore, laparoscopic surgery has become the basic skill of surgeons.

2. The existing problems

2.1 Defects in teaching mode

2.1.1 The internship time is limited

International students enter clinical practice in 4–5 years and practice general surgery for 4 weeks. Due to the short internship time, foreign students have just become familiar with the general operation process of leaving the department, and their knowledge is very limited.

2.1.2 Lack of unified teaching materials

At present, English textbooks on the market are mainly for learning theoretical knowledge, but few textbooks are used for clinical practice, and teachers can only combine teaching experience.

2.1.3 The distribution of teachers is unreasonable

After reporting to the department, foreign students face the problem of teacher allocation for the first time. Because of the hard clinical work, there are few doctors who can bring and are willing to accept internships for foreign students. Foreign students are generally assigned to departments for teaching. There are many students and few teachers, which will inevitably force teachers to pay insufficient attention to students, and the enthusiasm of foreign students also affects them.

2.1.4 Learning methods are outdated

With teachers often copying the traditional LBL teaching mode, taking teachers as the center and imparting knowledge, foreign students learn passively, their enthusiasm for learning is not high, and it is difficult to exert their subjective initiative.

2.1.5 The evaluation method is the only one

General surgical examination usually takes the form of written examination, or uses typical cases to study the diagnosis and treatment of common diseases, which lacks the examination of general surgical skills (incision, suture, knotting, disinfection tablets, etc.).

2.2 There are few practical opportunities

Teachers are too busy to take care of international students. General surgery is urgent, more people need help, and there may be no mistakes in all contacts. Most of the faculty and staff are low-level doctors who are worried about “trouble” and are unwilling to take overseas students to surgery, so they have no time to introduce complicated surgical operations and preventive measures for overseas students.

2.3 Language communication barriers

Most of the overseas students come from Southeast Asian and African countries such as India and Nigeria, and their English proficiency varies. International students usually have not studied Chinese. Although some students are complacent about a few Chinese in college, they are unable to communicate effectively due to lack of Chinese communication environment, especially complicated medical vocabulary. Although teachers have rich clinical professional knowledge, they can not use to communicate, which causes the problems that foreign students cannot understand their English. Some teachers take interpreters to avoid such embarrassment, but sometimes foreign students will ask ignorant questions. It can be said that language is the biggest obstacle to the quality of internship.

2.4 Students’ own problems

The basic knowledge of international students is weak, so it is difficult to master the corresponding knowledge scores in a short time after entering clinical practice. Some foreign students have a correct learning attitude. Students are prone to feel lonely and depressed due to poor language communication, cultural differences, heavy learning pres-

sure, heavy economic burden and lack of effective communication. Some foreign students are not very motivated to study. They are often late and just want to get a degree.

3. Measures

3.1 Communication with students

Communication between teachers and students is an art of continuous exploration, and the quality of communication between teachers and students is directly related to the success or failure of teaching.

According to the detailed conversation between the author and the students from South Asia, where have a complicated structure after class, the author found that: (1) religion has a strong influence to them. One day, the author arrived at the classroom in time and found that many students didn't come. Interestingly, when their mobile phone received text message, they realized that they had class to attend. And there were important religious ceremonies, which were about an hour late. Students' beliefs should be respected as much as possible. (2) Students' language problems. After a week's contact, the author found that most of the students learn British English, while most of teachers learn American English. There are still many differences in pronunciation, grammar and logical thinking between them. For different accents, teachers try their best to communicate with students to understand their anxiety. Most students want to study and return to their own countries to get a doctor's license, which mainly brings pressure and motivation to them. (3) Teachers should teach according to the individual differences of students. Some students have good family background so that they can study in some noble schools and high schools, and they are very proficient in various physics, chemistry and medical foundations with good oral English. They can easily explain the main points of professional knowledge, while others could not be cultivated when they were young. For these students, teachers should explain the knowledge as easily as possible for teaching, and pay more attention to their anatomy and physiological examination.

3.2 Selection of teaching materials

Textbooks are important carriers of educational ideas and teaching contents, and have extensive radiation effects, which will affect the classroom learning effect, so it is important to choose good learning materials to make students understand the teaching contents after class.

There are many differences between Chinese textbooks and foreign training textbooks. English textbooks are detailed, suitable for self-study students and advanced academic research with normative, readable and practical language. Chinese textbooks, influenced by the academic atmosphere in former Russia for many years, are mostly procedural, clear, complete and easy to remember, but most of them are the entry stage of the discipline.

Europe and the United States have their own textbooks for teaching, while there is few professional textbook in China. Many schools have made positive attempts, but no system has been formed yet. For a clinical medical college, the course is independently written by teachers. Because the clinical work and teaching work are carried out at the same time, the writing team has no academic control over the echelon. Problems such as that there is no depth and relevance of disciplines of the teaching textbook are constantly appearing.

Therefore, in order to prepare for the course, the author found the books that have bought at the Royal Swedish Medical College in Northern Europe in order to better improve the teaching situation and arrange the practical knowledge and skills with the reference English books for the specific situation of medical college in China.

3.3 Arrangement of teaching content

In most cases, the author teaches in groups of about 20 to 30 foreign students according to their nationality. After the classes in laboratory, they study in the operating room most of the time. Considering the level of Chinese students and the current state of clinical medicine in China, unnecessary disputes can be avoided in this way. And the laboratory that transformed as simulated operating room makes foreign students feel comfortable during the training.

At the end of the theoretical lecture, it is also necessary to arrange some models and equipment every afternoon in order to help the students study and injection and surgery practice better in a self-help way. After returning to the dor-

mitory, they can use banana peel, chicken legs, etc. to practice, which are easy to find and cheap. And then they bring their own work and come to the laboratory so that teachers can help them and correct their mistakes. A standard operation should be performed once a week with two surgeons to guide students to perform small animal surgery, so that they can be more familiar with their different roles in actual operation. It is important to train students' anatomy ability because general surgery is the cornerstone of surgery and to constantly encourage students to use their basic surgical skills, such as cutting, binding, suturing, emptying, etc. So that the students can quickly and easily step into the internship role.

3.4 Be familiar with foreign students' English accent and strengthen their teaching level

Of the clinical medical students enrolled in our school, 98% are from Indian, and the rest are from Southeast Asian countries, such as the Philippines and Malaysia, where English is the second official language. Although their English level is generally high, due to the different geographical distribution, the international students' oral English level is different because of their local accent. In addition, the English teaching mode based on examination has been adopted for a long time in China, which makes many teachers' English listening and speaking ability relatively poor, which brings some obstacles to the communication between teachers and students and affects the teaching quality. Therefore, teachers should take the initiative to communicate with students, get used to their accent in order to actively improve the English teaching level. Teachers with good English should be chosen and more attention should be paid to the compilation of the course: in the process of preparing lessons, we should first focus on the key points and difficulties of teaching with the help of original English references to compile a course. Then, each teacher should write a paper on the course content so that the problems and methods can be collectively discussed after the trial class. In this way, teacher can learn from each other and draw lessons from others' content setting and teaching methods.

4. Conclusion

Foreign student education has become an important part of China's education. Recruiting and training foreign students can prompt international cultural exchanges. How to improve the teaching quality of medical students and attract more foreign students to study in China has become the research direction of medical educators. For medical teachers, studying teaching surgery is a brand-new subject. The author was ordered to carry out teaching work in the spring semester of 2009. At present, there are three classes of students who have completed the study of a course. The author hope this experience can be used as reference to cultivate more medical students with modern competitiveness and improve China's international status.

References

1. Yuan T, Yang H, Lu Y. Current situation and strategies of physiology teaching for medical students (in Chinese). *Super Baby* 2018; (17): 290.
2. Lin C, Cui L, Wei L, *et al.* Teaching experience of general practice course of surgery for medical undergraduate students (in Chinese). *Civil Aviation Medicine* 2020; 30(2): 115–117.
3. Wang L, Liu Z. The cultivation of humanistic spirit of Chinese medicine in surgical practice teaching for overseas students (in Chinese). *Health Vocational Education* 2019; (9): 119–121.
4. Sun D, Song J. A preliminary exploration on the reform of surgery English teaching for international students in the new situation. *China Continuing Medical Education* 2018; (26): 10–12.