# Problems and Coping Strategies in Clinical Practice in the Department of Endocrinology

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# Abstract

Clinical practice is a necessary learning stage of medical students and an important supplement to classroom learning. Endocrine diseases have a high incidence and involve a wide range of people, and the importance of endocrinology in clinical practice cannot be ignored. At present, there are some problems in the process of internship, such as students' insufficient attention, the effect of traditional teaching is not satisfactory, lack of humanistic quality education of students, the evaluation mechanism lack or not perfect, etc. To solve these problems, teachers in endocrinology department can improve the teaching effect of endocrinology practice by adjusting students' attitude, adopting scientific teaching methods, strengthening the humanistic quality education and improving the assessment system.

# Keywords: department of endocrinology, clinical practice, strategy

Clinical practice is an important part in medical higher education. The combination of basic medical theory and clinical practice helps to cultivate students' clinical thinking, master clinical skills and lay a solid foundation for future clinical work (Liu, & Zhang, 2020). With the improvement of living standards, endocrine-related diseases have an increasingly significant impact on people's physical health. Endocrinology has strong professionalism, wide content coverage, complex diseases, multiple organs in the whole body. In addition, the clinical rotation time of the endocrinology department is urgent, which is difficult for medical students to master knowledge (Li, Qi, Li, & *et al.*, 2017). In the limited internship time, how to let interns know more endocrine and metabolic diseases as much as possible and maximize the internship effect is a problem that every endocrinology instructor needs to solve.

# 1. Current Situation and Problems of Clinical Practice in the Department of Endocrinology

# 1.1 Students Don't Pay Enough Attention

As a "rising star" of internal medicine, endocrinology department has received more and more attention in clinical practice at all levels of hospitals. However, in the impression of many interns, the Department of Endocrinology is still a "traditional small department", which is not given enough attention (Pan, Zhang, Guo, & *et al.*, 2022). In addition, some students regard clinical practice as the preparation stage for postgraduate entrance examination, lack of enthusiasm in clinical practice, less investment, and perfunctory response in work.

# 1.2 The Effect of Traditional Teaching Is Not Satisfactory

The main function of the endocrine system is to release hormones under the control of the nervous system and on the basis of material metabolism feedback to regulate human growth, development, reproduction, metabolism, aging and other life phenomena. The occurrence of endocrine diseases is caused by pathological changes of endocrine glands and tissues. At present, the clinical teaching is still using the traditional teaching method, which the students follow the teachers to receive and deal with patients. Compared with other disciplines of internal medicine, the content of endocrine diseases is more abstract. Only by the teacher's oral explanation of knowledge points, students feel very boring, and the hormone regulation and the mechanism of action is complex, relying on rote memorization, the learning effect is unsatisfactory. Many students said that they could not master relevant knowledge after only one month of clinical practice.

## 1.3 Lack of Humanistic Quality Training

Medicine is one of the most humane spirit of traditional science, with people as research object, and directly serving the people (Liu, & Zhang, 2020). Modern medical model is bio-psycho-social medical model, which requires medical students to have not only medical professional knowledge and skills, but also high humanistic quality. In terms of teachers, teachers pay attention to the cultivation of clinical skills and ignore the education of medical humanistic quality. In addition, due to the busy clinical work, humanistic quality education cannot be taken into account when teaching specialized skills. In terms of students, they think that clinical skills are helpful to obtain high scores in job hunting examination, so they practice more, while for humanistic knowledge, they don't think it plays a big role, so they don't pay enough attention.

#### 1.4 Lack or Imperfect Assessment Mechanism

In some hospitals, there are no clear and quantitative evaluation indicators in the practice process of medical students (Zhang, D., 2022). The traditional examination method of graduation often adopts the form of single-person closed-book centralized examination. A large number of examination questions in the examination mainly focus on the diagnosis and treatment of diseases in a single system, and are limited to the assessment of theoretical knowledge, which is not conducive to the cultivation of medical students' skills and humanistic quality (Yu, & Chen, 2022). Some hospitals have not quantified and assessed the teaching work of teachers, resulting in insufficient attention to the teaching work of some teachers and weak teaching responsibility.

#### 2. Coping Strategies for Clinical Practice Problems in Endocrinology Department

#### 2.1 Adjust the Students' Attitude Towards Clinical Practice

A good learning attitude is conducive to the study and growth of medical students. Teachers do a good job in propaganda and education when students come to the department for the first time, inform the importance of endocrine system diseases, stimulate students' interest in learning, so that students can learn actively and seriously, master theoretical knowledge and clinical skills, so as to adapt to the upcoming medical work. In addition, students should be taught to respect patients, be considerate of patients, and be grateful to patients.

#### 2.2 Adopt Scientific Teaching Methods

Problem-Based Learning (PBL) elicits solutions from specific cases, and according to the solutions, the content required by the syllabus is understood, memorized and extended to master, and the infusing style is changed into a heuristic, so that students can change from passive to active and increase their learning interest (Li, 2019). Teachers prepared lessons, selected typical cases and asked questions. The selected questions should be for the purpose of enhancing students' interest and fully mobilizing students' enthusiasm and initiative. If it can guide students effectively, it will help students to analyze deeply and find out the reasons, stimulate students' interest in knowledge, and improve their ability of self-study. For example, the diagnosis and treatment process of polycystic ovary syndrome, what is polycystic ovary syndrome, and whether it is a gynecological disease or an endocrine disease. These questions can stimulate students' interest in inquiry and guide them to review relevant knowledge. In the process of seeking answers to these questions, students can combine basic theoretical knowledge with specific cases to make corresponding diagnosis, thus forming their own clinical thinking. In addition, in the course of the discussion, the students' ability to express themselves was improved, and their understanding of PCOS was deepened. In the process of teaching, the teacher can inspect the students in real time, which helps to find out what knowledge the students have not mastered in time. For example, when describing the diagnosis and treatment of diabetic ketoacidosis coma, it was found that many students did not understand the diagnosis and treatment ideas of diabetic ketoacidosis coma. They could not distinguish diabetic ketosis, diabetic ketoacidosis, diabetic ketoacidosis coma, and did not know the diagnostic criteria. The maintenance of electrolyte acid-base balance mentioned in the treatment only stays in the classroom learning content, do not know when to supplement alkali, how to supplement alkali, when to supplement potassium, how to supplement potassium, and matters needing attention. Teachers should solve problems in time, so that students can better grasp the relevant theoretical knowledge.

#### 2.3 Strengthen the Humanistic Quality Education of Medical Students

The reform and development of medical education is to fully carry out the scientific development concept of people-oriented, and its basic purpose is to promote students to have both medical skills and medical ethics. Medical students will start to contact patients after entering the clinical practice stage, and need to change the learning concept of "disease-centered" to "patient-centered" (Liu, & Zhang, 2020). Therefore, teachers should

attach great importance to the cultivation of students' medical humanistic quality, carry out humanistic quality education throughout the whole process of clinical practice, and improve their moral ethics, humanistic care and communication skills. Medical interns should not only learn medical professional knowledge, master clinical skills, but also strengthen the study of humanistic knowledge, so as to better adapt to clinical work in the future.

## 2.3.1 Focus on the Cultivation of Communication Skills

Through communication, the doctor can understand the patient's condition, and the patient can know the treatment plan formulated by the doctor in order to achieve the purpose of seeking medical treatment. The teacher requires interns to think from the other side when communicating with patients, truly understand the most real demands of patients, and at the same time inform patients of the next treatment plan in a way that patients can understand, so as to achieve real effective communication. In clinical practice, students are guided to actively participate in various clinical work, from the most basic medical history, ward rounds, etc., through repeated communication exercises, gradually master communication skills. Students should pay more attention to learning and observe the process of communication between teachers and patients so as to find out their own communication methods. Clinical teachers should set an example in daily teaching, do a good job of teaching by example, warmly receive patients, respond to the patient's urgent need. At the same time, teachers should also pay attention to the communication process of students in the teaching process, and point out and correct problems in time to avoid medical disputes.

### 2.3.2 Cultivate Students' Sense of Humanistic Care

In the book "The Great Doctor's Sincerity", Sun Simiao'e warned that the medical students should not only "expand their medical sources and be diligent and tirelessly", but also have a heart to empathize with the suffering of others, "if you had it yourself". Therefore, in the process of teaching, teachers should pay attention to teaching by example, while imparting medical knowledge, they should also impart serious and responsible work attitude and humanistic care for patients to students. "A doctor's benevolence" and "a doctor's parents' heart" should be reflected at any moment on the road of studying medicine (Li, 2019). Only by establishing a good doctor-patient relationship with patients, patients are more willing to fully inform their symptoms, students can be anxious about the patient's urgent matter, and the diagnosis and treatment plan can be more suitable for patients.

#### 2.4 Improve the Assessment System

The clinical teaching stage is one of the main components of medical education, and the selection of scientific assessment forms can truly understand the effects of teaching (Wang, 2018). Therefore, it is necessary to establish a standardized examination system, which can not be merely a formality. Suggestions for examination include theoretical examination, operational examination and humanistic quality, which can not only examine students' mastery of theoretical knowledge, but also examine students' practical ability and ability to communicate with patients.

Mini-Clinical Evaluation exercise (MiniCEX) was developed by the American Academy of Internal Medicine as an assessment tool to assess the clinical ability of residents. It not only has the assessment function, but also integrates teaching elements. So that residents can learn and grow in the process of being evaluated (Yuan, Yang, Li, & *et al.*, 2024). The Mini-CEX assessment includes the following seven parts: communication skills, overall clinical competence, organizational effectiveness, clinical judgment, humanistic care, physical examination skills, and medical interview skills (Li, Zhu, Zhang, & *et al.*, 2020). Mini-CEX can cover all contents of clinical work, which is simple, easy to implement, and can carry out targeted assessment. With the help of Mini-CEX, teachers can fully grasp students' diagnostic ability and potential problems, find and solve problems in time, and ensure that the clinical assessment process achieves the expected effect and gives full play to its value (Zhang, Liu, & Yu, 2022).

The establishment of a teaching quality evaluation system is conducive to cultivating medical students' solid theoretical knowledge, clinical practice ability and good professional ethics (Guan, Li, Cui, & *et al.*, 2018). The core purpose of educational assessment and evaluation is to promote the improvement of teaching (Yuan, Yang, Li, & et al., 2024). Teachers can observe the effect of clinical teaching in assessment, and further strengthen relevant knowledge in subsequent teaching to achieve the effect of mutual teaching and learning (Chen, Lin, Su, & *et al.*, 2021).

In conclusion, endocrine diseases have a high incidence, involve a wide range of people, and have a certain impact on various organs. Medical students will inevitably encounter endocrine diseases whether they are engaged in specialized or general medicine work in the future. Clinical practice is an important supplement of

classroom teaching. At present, there are still some deficiencies in the clinical practice teaching of endocrinology department, so we need to adjust students' attitude, adopt scientific teaching methods, strengthen the humanistic quality education, improve the assessment system, so as to further improve the clinical practice teaching effect and achieve the purpose of impart knowledge and cultivate people.

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