

# Application of Tutorial System for Clinical Medicine Undergraduates in Grade-a Tertiary Hospitals

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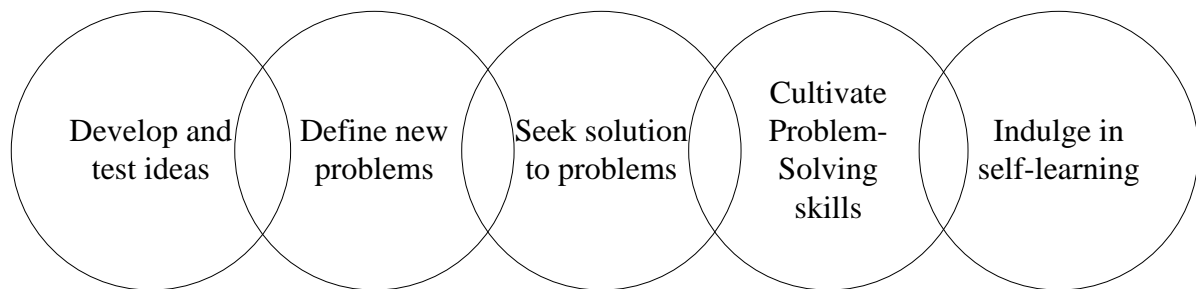
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**ABSTRACT.** The undergraduate tutorial system is a talent training model that aims to effectively improve the quality of talent training in universities, promote the improvement of students' overall quality, and stimulate students' scientific research and innovation capabilities. At present, grade-A tertiary hospitals play an increasingly important role in the training of five-year clinical medicine undergraduates in medical universities. The implementation of a tutorial system in grade-A hospitals has a positive and obvious effect on undergraduate training. However, the specific mode of implementing the tutorial system for clinical medicine undergraduates is still in the exploratory stage and a standard system has not yet been formed. This paper discusses the specific problems and challenges faced by the current grade-A hospitals in the implementation of clinical medicine undergraduate tutorial system, and puts forward the implementation suggestions to deal with it, so as to promote the medical undergraduate tutorial system in the grade-A hospitals effective implementation.

**KEYWORDS:** Clinical medicine, Undergraduates, Tutorial system, Grade-a tertiary teaching hospital

## 1. Introduction

The record of tutorial system can be traced back to Oxford University in the 15<sup>th</sup> century. 150 years ago, as an important teaching method, the tutorial system was formally established and became the educational cornerstone of Oxford University [1]. The tutorial system for undergraduates concretizes and institutionalizes the requirement of teachers' teaching and education, which is conducive to strengthening the ideological education of college students, the individualized development of students and the improvement of the overall quality of undergraduate education. Various attributes of a tutor are shown in Fig. 1.



*Fig.1 Attributes of a Tutorial Session [2].*

Doctor is a noble profession, but also a special profession. Noble in that profession can save lives, and special in that it takes a long time to train a qualified doctor. The training goal of clinical medicine undergraduates is to cultivate strong clinical practice skills and preliminary scientific research ability. The cultivation of clinical medicine undergraduates lays a foundation for clinical medicine professionals with great potential, innovative ability and strong international competitiveness. The traditional medical education attaches importance to imparting of knowledge, to the cultivation of clinical skills, and on students' professional ethics, lack of humanistic quality and the cultivation of clinical thinking ability, caused the undergraduates' practical ability is poor, lack of communication effectiveness, scientific research consciousness weak, independent thinking, creativity and critical thinking level is low. Clinicians need to make use of professional knowledge to diagnose and treat patients, during which they need not only a solid

theoretical foundation, but also skilled operation ability. Medical theoretical knowledge can be realized through the teaching process, while operational ability needs to be exercised through practice. As an important base for clinical practice of medical undergraduates, grade-A tertiary hospitals have been widely implemented in various medical colleges and universities in China. However, the implementation of the tutorial system in the grade-A tertiary hospitals is still in the exploratory stage. While helping medical undergraduates to improve their practical operation ability, there are also some problems in the specific implementation. This paper analyzes the problems existing in the application of the tutor system for clinical medicine undergraduates in grade-A tertiary hospitals, and designs the specific implementation plan.

## **2. Existing Problems**

The tutorial system for medical undergraduates brings both opportunities and challenges to the cultivation of students. In particular, the implementation of the tutorial system in grade-A tertiary hospitals has its own unique problems, because the hospital itself has to undertake normal medical work. The tutorial system for medical undergraduates has the following main problems, which are explained in the following aspects.

### **2.1 Tutor Resources**

The implementation effect of the tutorial system largely depends on the initiative of tutors and their accumulation of professional knowledge. Tutors can simulate students' thinking and reflection, thus improving their business ability. Therefore, the selection and allocation of tutor resources are the key factors to determine the quality of teaching [3].

Firstly, the number of clinical tutor resources is small. Clinical medical tutors should not only have skilled professional knowledge, but also have good medical ethics and teachers' ethics. Because the profession of doctor is different from other professions, it needs to have good character. Doctors who meet the requirements of clinical tutors in both aspects are undoubtedly the backbone members of the hospital, and the number is limited.

Secondly, the guidance time of clinical tutors is little [4]. The number of patients received every day in grade-A tertiary hospitals is huge, and the medical work undertaken by the clinical tutor is heavy. In addition, clinical tutors often undertake scientific research tasks at all levels, which is a great pressure for scientific research. Furthermore, clinical tutors should guide not only medical undergraduates but also postgraduates. The comprehensiveness and meticulousness of the guidance for medical undergraduates have been seriously affected. The clinical tutor often participates in some public benefit activities and scientific seminars, which occupy the clinical tutor's time to some extent. It can be seen that clinical tutors are busy with their work and inevitably ignore the effective guidance for medical undergraduates [5].

Thirdly, the number of medical undergraduate students is large, some of the tutors do not meet the guidance qualifications. Due to personal ability, the clinical tutor does not have a clear understanding of the responsibility of the tutor. Sometimes, tutor has rebellious emotions and lacks a sense of responsibility, so tutor is unable to deal with the relationship with students, thus affecting the cultivation effect of students.

### **2.2 Shortage of Clinical Training Time**

Medical undergraduates are required to systematically study the theory and fundamentals of medicine, usually over a period of three years. At the beginning of the fourth year, students enter the hospital to begin clinical practice. However, medical undergraduate graduates need to complete graduation thesis and publish academic thesis, employment and postgraduate entrance examination will take up a lot of internship time. In a short period of time, medical undergraduates cannot adapt to the tutorial system, which leads to low efficiency of implementation and affects the effect of training. In addition, due to the long training process of medical students, it is often necessary to enter into the next stage for the cultivation of master and doctoral students, which leads to the reduction of medical undergraduates' limited time to communicate with their supervisors, lack of enthusiasm and passive learning.

### **2.3 Medical Resources**

Although in recent years, the medical conditions of China's grade-A tertiary hospitals have been improving year by year, the medical conditions of that year have not reached the leading level and cannot be popularized to the vast number of patients. In addition, the current sharp contradictions between doctors and patients, doctors in medical operations, often under greater pressure. All of the above reasons lead to less opportunities for medical undergraduates to practice under the guidance of tutors, and they usually only practice through observation records and dictation from

tutors. Therefore, the teaching quality of the tutorial system is often not guaranteed, the implementation effect is poor, and the effect of students' ability cultivation is slow.

#### **2.4 Quality of Medical Undergraduates**

The basic knowledge and quality of medical undergraduates are not consistent, and there is often polarization. In the process of guidance, the tutor's communication efficiency with students is low, and the advantages of the tutorial system cannot be reflected in the limited communication process. Some students fail to summarize and review in time in the following learning process, which leads to the deterioration of the teaching effect. Some undergraduate students' psychological factors will also lead to the deterioration of communication quality, and they tend to passively receive professional knowledge. Tutors need to spend more time caring about students' psychological activities and guiding them, which also increases the tutor's workload invisibly.

#### **2.5 Lack of Management Mechanism**

At present, the implementation of the tutorial system has been gradually explored in the grade-A tertiary hospitals, and the management has a general framework. However, in the implementation process, the details are mainly arranged by the tutor, and the managers have no meaningful feedback on the implementation effect of the tutorial system. It is of great significance for the implementation and optimization of the tutorial system to plan the content of guidance, evaluate the effect of guidance and discuss the methods of guidance. However, the promotion mechanism of the tutorial system has not been completely established in the grade-A tertiary hospitals. The evaluation mechanism needs to be evaluated and discussed from the perspective of tutors and students so as to play an important role in the better implementation of the tutorial system. For example, the tutorial system should implement the dual selection mechanism of tutors and students. Once the students want to change direction after a period of guidance, how to change the tutors is not given by many grade-A tertiary hospitals. Such problems need to be regulated in the management system so that the tutorial system of medical undergraduates can be implemented well.

### **3. Suggestions on the Implementation of Tutorial System**

Through the analysis of the main problems existing in the implementation of the tutorial system for medical undergraduates in the grade-A tertiary hospitals in the previous Section 2, it can be seen that the implementation of the tutorial system is still in the exploratory stage. This section puts forward some suggestions on the implementation of the tutorial system in the grade-A tertiary hospitals.

#### **3.1 Clarify the Guiding Principles of the Tutors**

First of all, set up the correct values and moral values, attach importance to the cultivation of good medical ethics. Being a doctor is a noble profession and a special profession. Moral character is the foundation of career, medical workers need to have a sense of responsibility, compassion and noble spirit of dedication. As the leader of students' career, tutors should practice the values and rigorous style of doctors and cultivate the professional concept of medical undergraduates.

Secondly, attaching importance to the training of clinical skills and the cultivation of clinical thinking is the basis of clinical work for medical students. However, medical students who have just begun to contact with clinical practice do not have enough understanding of its importance, which needs to be repeatedly emphasized in the teaching process.

Thirdly, in clinical learning, tutors help students learn how to raise questions and think independently, guide students to look for direct evidence from clinical practice, and then consult relevant literature to find evidence for solving problems. Further evaluate the authenticity and applicability of the evidence, and make appropriate use of the evidence for diagnosis and treatment in the light of the patient's specific situation. Finally, observe the curative effect and summarize the experience of diagnosis and treatment.

#### **3.2 Multi-Tutorial System**

The multi-tutor system can help students get in touch with more tutors, carry out research, practice and study in different tutor fields, and truly focus on the interests of medical undergraduates to achieve high-level cultivation. The multi-tutor system can reduce the guidance frequency of each tutor to a certain extent, so as to improve the training quality of medical undergraduates. The multi-tutor system can be divided into two stages. In the first stage, medical

undergraduates should be in the stage of studying medical theory. They should choose several interested tutors. In the second stage, through the mutual selection of student tutors, the tutors in the internship process in the grade-A tertiary hospitals will be determined before the internship.

Medical undergraduates can use the mechanism of mutual tutor selection to select several preferred tutors. With the deepening of contact and communication, students can determine the direction of study according to their interests and preferences. The next time you choose a tutor, you can be more specific about your learning objectives and reduce the number of tutors. In the next stage, when medical undergraduates choose their tutors again, they can be more specific about their learning objectives and reduce the number of tutors until the only one is finally determined.

### **3.3 Establishment of Management Mechanism**

A sound management mechanism can improve the implementation efficiency of the tutorial system in grade-A tertiary hospitals. The management mechanism needs to consider the following points:

(1) Improve the evaluation system for students in practice. The academic Affairs Section of the university shall send special personnel to check the internship attendance at any time, regularly check the internship notebook and report the internship experience, and establish the grading mechanism for students by the tutor.

(2) Establish a unified standard for inspiring the management and evaluation of the tutor, quantitatively evaluate the tutor's work, convert it into teaching workload, and provide reference for professional title evaluation. Constantly learn from experience, explore and summarize, and improve the tutor system of clinical medical colleges.

(3) The tutor should pay attention to the study of educational theory, master the basic rules and methods of educational scientific research, actively carry out teaching reform with new thinking and implement innovative medical education. Tutors should explore, reflect and summarize in their own clinical teaching practice, and constantly cultivate their own teaching and research ability. Tutors should constantly challenge themselves, so as to equip themselves with more extensive knowledge and various skills, common information technology and humanistic and social science knowledge corresponding to innovative education, and constantly improve their scientific, cultural and moral literacy.

## **4. Conclusion**

At present, medical undergraduate education lays more emphasis on the education and study of book knowledge, while what is relatively lacking is the development of students' thinking, improvement of clinical skills and cultivation of scientific research level. The cultivation mode of undergraduate tutor system in the grade-A tertiary hospitals breaks the current situation of talent cultivation of the same scale and specification, constantly reflects the educational characteristics of people-oriented and individualized education, and meets the needs of individual development, social development and medical development. This will certainly become a development trend of medical education and teaching.

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