

Several thinking about the training of eight – year program medical students in clinical work and scientific research of ophthalmology

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眼科八年制学生临床和科研培养的思考

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摘要

针对眼科八年制学生的培养要求,结合自身从事眼科八年制学生的教学经验,就眼科基础理论学习、医患沟通能力培养、临床基本技能训练、显微手术技巧学习、眼科亚专业兴趣培养及基本实验技能培训等方面进行了思考,以期提高眼科八年制学生的综合能力。

关键词:眼科学;八年制学生;教学经验

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Abstract

• In allusion to the training requirements of eight – year program medical students, combining with our own experience in teaching this type of the students in ophthalmology, we have done some thinking about the training methods of eight – year program medical students in order to improving their comprehensive abilities of ophthalmology. Several suggestions are made in various aspects, including the study of the basic theory of ophthalmology, the training of doctor – patient communication skills, the training of basic clinical skills, the interest developments in ophthalmology subspecialty areas and the training of basic experiment skills.

• **KEYWORDS:** ophthalmology; eight – year program

medical student; teaching experience

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INTRODUCTION

The purpose of eight – year higher medical education is to train the medicine talents with the degree of Medical Doctor (M. D.). The talents should be qualified for clinical work and also meet the needs of scientific research development in today's rapid developing of science and technology. Ophthalmology, which is considered as an important branch of clinical medicine, has complicated regional anatomy and strong specialized feature. Therefore, the training method of eight – year program medical students of ophthalmology has its own characteristic comparing with other clinical subjects. This article tries to depict authors' personal understanding combining with their experience in teaching eight – year program medical students of ophthalmology.

Strengthening the Study of the Basic Theory of Ophthalmology

Eight – year program medical students only have a preliminary understanding of ophthalmology and lack of systematic mastery of it through undergraduate study. This may seriously impact the improvement of their abilities in clinical work. Ophthalmology teaching material is a summary of the basic theory of ophthalmology summed up by ophthalmology specialists. It is a theory which is the standards and regulations to guide ophthalmologist as fundamental principles in clinical practice. Therefore, leaning ophthalmology teaching material should be the key point in ophthalmologic basic theory study^[1]. We even require eight – year medical program students of ophthalmology to recite ophthalmology teaching material from which they learn theoretical knowledge in undergraduate study in order to strengthen the study of basic theory of ophthalmology. We also request them to finish the systematical study of ophthalmology teaching material in two months after entering the department of ophthalmology in order to make them systematically master the ophthalmologic basic theory more efficiently. And examinations are performed to know which degree they grasp the basic theory of ophthalmology. On this basis, we ask them

for further learning other academic books about ophthalmology subspecialty areas and conduct regular examinations. Through the above mentioned measures, these eight – year program medical students come to have a comprehensive mastery of ophthalmologic basic theory and greatly improve their learning ability of clinical ophthalmology. We have acquired quite good teaching effect with these methods.

Attaching Importance to the Training of Doctor – Patient Communication Skills A doctor's career is to cure patients, which naturally involves interpersonal communication. With the amelioration of people's material and cultural living standard, patients come to have higher requirements for their health and more expectation on medical treatment. Meanwhile, patients (or their family members) can have preliminarily understanding of the disease which they catch at any time with the popularity of the network. Hence, simple doctor – patient communication cannot satisfy the patients or families in most cases, which requires a doctor to have better doctor – patient communication skills. Doctor – patient communication is quite important in clinical practice, especially under present condition in which the doctor – patient relationship is so complicated. Good doctor – patient communication skills need to be practice in advance. After entering the department of ophthalmology, eight – year program medical students are first arranged to follow their senior ophthalmologists to involve in preoperative conversations with patients and their family members so as to grasp conversation skills from the senior ophthalmologists.

Then the doctor – patient communication is gradually transformed into the mode in which the students play the main roles with the guidance of the senior ophthalmologists. The senior ophthalmologists can supplement the insufficient of communication content in time. Through the repeated practice, the vast majority of eight – year program medical students finally obtain a good command of doctor – patient communication skills.

Paying Attention to the Training of Basic Clinical Skills

Ophthalmologic clinical basic skills are composed of basic ophthalmologic examinations and basic therapeutic operations, including slit lamp examination, ophthalmofundoscopy, intraocular pressure measurement, gonioscopy, perimetry, lacrimal passage irrigation, subconjunctival injection, conjunctival concretion removal, corneal foreign body removal, chalazion excision and so on. Eight – year program medical students are arranged for the targeted training of these basic examinations and basic operations for two months. Senior ophthalmologists demonstrate these basic clinical skills in the first place. Then the students practice again and again under the guidance of their senior ophthalmologists. After a period of time, almost all the eight – year program medical students gain a good command of these basic skills. They can even do some simple minor surgeries independently.

Strengthening the Study of Microsurgery Skills Most of the eye diseases need microsurgery treatment. As the future ophthalmologists, eight – year program medical students must

bolster the training of ophthalmic operation skills. The students work as residents after learning the ropes in the ward for one month. Therefore, they have the opportunity to take part in the operation as surgical assistants. Before working as surgical assistants, they are required to watch the live operation demonstrations of the ophthalmologists over and over again and then do some simple operations with the operating microscope in the ophthalmic laboratory, such as suturing and trimming so as to experience the true feeling of doing operations under the microscope. Through repeated training for two months, most of these eight – year program medical students qualify themselves for the job as ophthalmic surgical assistants. Some of the students are even capable of the suturing of bulbar conjunctiva on their own.

Developing Interest in Ophthalmology Subspecialty Areas

With the development of ophthalmology, subspecialties of ophthalmology tend to have more and more detailed divisions and specializations. In three grade first class hospitals, departments of ophthalmology are usually be composed of the subspecialties of cataract, glaucoma, vitreoretinopathy, ocular surface diseases, orbital and ocular plastic and visual optics. Eight – year program medical students in our hospital enter the department of ophthalmology in the sixth year for ophthalmology study which remains for three years. In the first year, the students need to study in each ophthalmology subspecialty in order to have the basic familiarity with the diagnoses and treatment methods for various kinds of eye diseases, and have the proficiencies in surgical assistant work as well. In the second year, the students choose their subspecialty areas according to their own interest and have further specialized training. In most cases, the students choose their subspecialty areas which their tutors are engaging in so as to easily obtain the guidance from their tutors. Therefore, the tutors can impart expertise to their students and answer their students' questions better in clinical work. Through such training, most students can well hold the theoretical knowledge and practical operations of their own subspecialties.

Strengthening the Training of Basic Experiment Skills

The goal and requirement of talent training of eight – year program medical students is to make them qualified for both clinical work and scientific research in order to meet the need of current scientific research development^[2]. The scientific research training is a gradual process. First of all, in order to grasp the experiment skills, the students are required to follow their seniors to conduct scientific researches. Then they try to engage in some routine experimental operations step by step, such as cell culture, immunohistochemical staining and other molecular biology experiments until they can completely master these experimental methods. Eight – year program medical students are asked to complete the above tasks in the first year after entering the department of ophthalmology. On this basis, the students take counsel with their own tutors together to determine the research topics. The students begin to carry out their research projects in the second year as a

general rule. In order to know the students' research progress, the students are arranged to perform special reports regularly to their tutors. Students' original data of the reports are preserved by their tutors, which can supervise and urge students to conduct their research projects rapidly and facilitate the review of their graduation theses to prevent cheating in scientific researches from the beginning. Through such training of scientific research, all the eight-year program medical students of ophthalmology can finish their research projects successfully with high quality in the three years ophthalmological study.

Eight-year program medical students should correctly deal with the relationship between the clinical practice and scientific research. Clinical practice and scientific research can supplement each other. Clinical practice discovers and raises questions. Then scientific research analyzes the question and gives the new methods and techniques to solve the problems^[3]. Eight-year program medical students need to pass the thesis defenses before graduation, which makes a part of students neglect the training of clinical work abilities and only pay attention to the training of scientific research abilities. If the students are incapable of clinical work, the depth of the questions and the solutions they pose will usually

be inadequate, which may greatly limit the developments of their scientific research abilities. The training of the clinical work abilities and the scientific research abilities of eight-year program medical students is a gradual process which needs the joint efforts of both tutors and students.

In a word, eight-year program medical students have a high comprehensive quality and they also have an urgent need to be trained in both clinical work and scientific research abilities. Early, formal and gradual training is beneficial to their all-round developments and lays a solid foundation for their future becoming excellent medical workers under the new situation.

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