

## 2. MEDICAL EDUCATION IN CHINA

### The Present Status of Higher Medical Education in China

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#### 1. The Development of Higher Medical Education from 1949-1987

The People's Republic of China is a developing country, and its higher medical education is developing, too. At the time of the founding of new China in 1949, there were only 38 higher medical and pharmaceutical schools nationwide with 15,000 undergraduates. In the 38 years thereafter, Chinese people took a tortuous and arduous course in their progress, especially with the calamity of the so-called "Cultural Revolution", which lasted 10 years. However, great progress has still been attained. Since 1978, the policies of reform and opening to the outside

world have been pursued by the state, and great attention has been given to medical education, including higher medical education. By 1987, there were 134 higher medical and pharmaceutical colleges and universities (including 11 medical faculties in certain universities) with up to 182,000 undergraduates. As compared with those documented in 1949, the number of medical schools and undergraduates has increased by 3.5 and 12 times respectively. From 1949 to 1987 the medical graduates totalled 618,000. Of course, as far as the need for medical service is concerned, with a huge population of over one billion in our country, there remains a great gap to be filled.

	Universities or Colleges	Undergraduates	Graduates
1949	38	15,000	---
1978	98	113,000	618,000
1987	134*	182,000*	---
	*(incl. 18 with 3-year schooling)	*(with 34,000 undergrads. of 3-year schooling)	

Figure 1. The Development of Higher Medical Education.

Nowadays, a fairly comprehensive medical education system has been set up consisting of primary, secondary and higher medical education, postgraduate education as well as continuing education. It greatly contributes to the supplying of diverse health manpower of various specialties for the health service.

#### II. Higher Medical Education Reform Since 1986

On the basis of extensive investigations and studies compiled with successive scientific verifications since 1986, the reform in higher medical education has been mainly carried out in the following respects:

##### 1. Reforms of the Levels of Higher Medical Education

The schooling period of higher medical education has been reformed from the original 5 types of 3, 4, 5, 6, and 7 years, and transformed and standardized to the present 3 types of 3, 5, and 7 years. The schooling period of graduate medical education remains unchanged. The three-year schooling education belongs to higher professional training, and no academic degree is awarded after graduation. The five-year schooling education denotes regular undergraduate training, and a bachelor degree of medicine is granted if the student passes the graduate examination. Those who complete the seven-year training period are granted a master's degree of medicine. The territory of our country is so wide, and the levels of economic development so diverse, that the graduates are

appointed to various posts to meet the demands of medical service at different levels.

Undergraduate Education		Graduate Education & Resident Training	Cont. Ed., Med. Service Research
3-year-schooling	Regular		
Nil	Bachelor degree conferred	Masters degree	Doctor degree
3 years	5 years	3 years	3 years
	7 years Masters degree		

Figure 2. The Levels of Higher Medical Education in China.

2. Revision of the Specialty Catalogue and Regulations for Establishing a New Specialty

After the revision, the former 50 specialties were summed into categories and 57 varieties, including 10 varieties for trial implementation. Hence, this will make the professional spectrum more rational. The newly-established specialty should be approved and recognized by the state through due formalities.

3. Resumption of the Academic Degree-Granting System

In the last 10 years, a great concern has been shown regarding the training of high-level health personnel. Ever since 1982, following the resumption of the academic degree-granting system, 202 Doctors of Medicine and 9787 Masters of Medicine were awarded. The postgraduate students totalled over 10,000 in 1987. Nowadays there are 82 higher medical and pharmaceutical schools and 32 research institutes offering master degree programmes in 92 specialties, and doctoral degree programmes in 68 specialties.

In the meantime, the international academic exchanges with other countries all over the world have been expanded and enhanced, and quite a large number of medical students have been dispatched abroad for further study. They have numbered about 5000 in the last 10 years. They have been studying in 25 countries, including the Federal Republic of Germany. Most of them have completed their studies and have returned, and have become the mainstay of various disciplines.

4. Expansion of the Training Scala and Enrolment of Undergraduates

It is conducted by increasing and stabilizing the annual enrolment of undergraduate students to 7% of the sum total of nationwide new student admission to colleges and universities. Particularly the expansion of the three-year schooling higher medical education cannot be overemphasized. These graduates will mainly be assigned to positions in the grassroots health service and rural areas to alleviate the urgent need for primary health care thereabouts.

5. Teaching Reform

Along with the changing prevalent patterns of diseases and death and the emergence of new ideas of health, the medical model is transforming from traditional bio-medical ones toward the current bio-psycho-social medical model. A new spectrum of elective courses mainly in the humanities and social sciences has been undertaken by a number of medical colleges and universities, e.g. psychology, social medicine, medical ethics, health economics, health care administration, etc. These courses are just in their initial stages and remain to be enhanced and intensified.

As for the pedagogical reform, the conventional method of class lecturing, mainly imparting knowledge, has been challenged, and the stress has been placed on fostering students' capabilities of independent thinking and working in association with self-learning. Total and weekly lecture-teaching hours have been cut down so as to encourage early contact with clinical practice.

Certain universities are experimenting with a problem-based curriculum and small peer discussion as their main teaching method with promising results.

#### 6. Continuing Medical Education

Postgraduate education was formerly achieved by entering short-term training courses offered by university hospitals or other major city hospitals. This enabled the training of competent professional workers in the absence of appropriate training and good organisation. It goes without saying that there is no integrated system. Presently, postgraduate medical education conducted as in-service training and closely joined with continuing medical education, which is characterized by up-dating professional knowledge, is being undertaken at certain universities. The work just starts from training house officers, and it is anticipated that after 3 - 5 years of full-time clinical training and attending relevant courses, they will be well-qualified clinicians.

#### 7. Administration of Medical Education

The departments concerned with the state strictly adhere to the reform guidelines, i.e. presecuting strategic planning and guidance, combined with tactical flexibility and the gradual expansion of the autonomy of universities in running themselves. At the same time there is the reservation of the functions in authoritatively evaluating and approving facilities, capability and quality of teaching. In this way, the medical schools all over the country will fully display their own superiority and uniqueness and will be invigorated therefrom.

The aim of reform and development in higher medical education lies in the establishment of a future educational system which will provide a comprehensive range of specialties and medical education of distinct levels, reasonable in structure and appropriate in scale, and which will actively accomodate the needs of China's socialist construction and meet the on-going demands of the national health care undertaking.