

## Article

# A Study on the Development of Modern Chinese Medical Education

Chao Qi <sup>1,\*</sup>, Bekhbaatar Batsaikhan <sup>2</sup> and Munkhnasan Delgerjav <sup>3</sup>

<sup>1</sup> Mongolian National University of Education, Ulaanbaatar, 14200, Mongolia

<sup>2</sup> Academy of Sciences of Mongolia, Ulaanbaatar, 14200, Mongolia

<sup>3</sup> National University of Mongolia, Ulaanbaatar, 14200, Mongolia

\* Correspondence: Chao Qi, Mongolian National University of Education, Ulaanbaatar, 14200, Mongolia

**Abstract:** The development of modern Chinese medical education represents a profound transformation in the history of Chinese medicine, undergoing a process of transition from tradition to modernity and from a closed system to an open one. This paper aims to provide a comprehensive review of the development of modern Chinese medical education, analyzing its characteristics, influencing factors, and implications for contemporary medical education. It offers historical insights for current reforms and the development of medical education. Through in-depth analysis of the introduction and initial development of Western medical education in the late Qing period, the coexistence and integration of Chinese and Western medical education in the Republic of China, and the profound impact of political, economic, and cultural factors on medical education, this paper explores how these changes shaped the evolution of Chinese medical education. Finally, it concludes by summarizing the insights of modern Chinese medical education for contemporary medical education and proposes suggestions for enhancing international cooperation and exchanges, focusing on practical and innovative education, and promoting diversified development.

**Keywords:** modern; China; medical education; development; Republic of China

## 1. Development of Modern Chinese Medical Education

### 1.1. Late Qing Period: The Introduction and Initial Development of Western Medical Education

During the late Qing period, as the Self-Strengthening Movement gained momentum and Western culture was introduced, Western medical education gradually began to take root in China [1]. In 1865, the Qing government established the Jiangnan Arsenal Translation Bureau in Shanghai, where Western medical texts were translated, laying the foundation for the spread of Western medicine in China. Later, the Qing government set up the Medical Bureau in the Tongwen Guan (the Translation College) in Beijing, marking the beginning of state-run Western medical education in China. Following this, several Western medical schools were established across China, including Tianjin Medical School and the medical classes at the Fuzhou Arsenal School, which trained a growing number of Western-trained medical professionals.

In the process of introducing Western medicine, the Chinese government actively promoted the reform and development of medical education. In 1896, the Qing government issued the "Regulations on Schools" which recognized medical education as an important part of higher education and established medical schools and specialized medical institutions. These institutions not only trained a large number of Western medical professionals but also laid the foundation for the future development of Chinese medical education.

Published: 16 December 2024



**Copyright:** © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

### *1.2. Republic of China: The Coexistence and Integration of Chinese and Western Medical Education*

During the Republic of China, social changes and cultural exchanges led to the coexistence and integration of Chinese and Western medical education. On the one hand, traditional Chinese medicine (TCM) education continued to thrive and spread, with a proliferation of TCM schools across China. These schools not only focused on the transmission of traditional Chinese medical theories but also adopted Western educational methods and ideas, driving the modernization and scientification of TCM education. On the other hand, Western medical education rapidly developed under government initiatives, becoming the mainstream form of medical education. At the same time, the TCM community began to borrow Western educational methods, further modernizing and scientizing TCM education.

The integration of Chinese and Western medical education achieved significant results during the Republican era [2]. Some medical institutions began to experiment with combining Chinese and Western medicine, training medical professionals who were equipped with the skills to integrate both traditions. Furthermore, medical scholars began to explore theories and practices for integrating Chinese and Western medicine, laying the groundwork for the development of this combined approach.

### *1.3. After the Founding of the People's Republic of China: Comprehensive Reform and Development of Medical Education*

After the founding of the People's Republic of China, the government placed great emphasis on the development of medical education. Through reforms in the educational system, optimization of educational resource allocation, and strengthening of faculty teams, medical education underwent comprehensive reform and development. Particularly after the opening-up period, with the rapid development of higher education and the deepening of healthcare reforms, medical education achieved significant progress in talent cultivation, scientific research, and social service.

Following the founding of New China, the government actively promoted the reform and development of medical education. On the one hand, it strengthened the standardized management of medical education and established a comprehensive medical education system. On the other hand, it focused on the quality and effectiveness of medical education, driving the modernization and internationalization of the medical education system. Additionally, the Chinese government worked to strengthen the integration of medical education and the healthcare sector, cultivating highly skilled medical professionals through closer connections between education and practice.

## **2. Key Characteristics of Modern Chinese Medical Education**

### *2.1. Diversity and Coexistence*

Modern Chinese medical education is characterized by its diversity and coexistence. Chinese and Western medical education coexisted, as did traditional and modern educational methods, as well as government-run and privately-run institutions, creating a multifaceted medical education system. This diverse system not only met the varying needs for cultivating medical talent but also facilitated communication and integration between different educational approaches.

In the coexistence of Chinese and Western medical education, both traditions borrowed from and influenced each other, driving the modernization and scientification of medical education. In the coexistence of traditional and modern educational methods, traditional medicine emphasized the preservation and promotion of cultural heritage, while modern medicine focused on integrating and applying contemporary scientific knowledge. The coexistence of state-run and private medical education systems complemented and promoted each other, collectively advancing medical education.

## 2.2. Integration of Theory and Practice

Modern Chinese medical education emphasized the integration of theory and practice. Through classroom teaching, clinical internships, and case analyses, medical education aimed to develop students' practical abilities and innovative thinking. At the same time, the theory and practice were mutually reinforcing, promoting the continuous development of medical science.

In medical education, classroom teaching is the primary way of imparting theoretical knowledge, where students learn basic medical knowledge and skills through lectures and case analyses [3]. Clinical internships were the means to cultivate practical abilities, allowing students to apply theoretical knowledge to real-world clinical settings. Case analysis, an important aspect of medical education, fosters students' ability to think critically and creatively to solve problems by analyzing typical cases and exploring solutions.

## 2.3. Clear Internationalization Trend

Modern Chinese medical education exhibited an increasingly evident trend toward internationalization. On the one hand, through study abroad programs and exchanges, China introduced advanced medical education concepts and methodologies. On the other hand, China actively promoted the internationalization of its own medical education, enhancing its global influence and competitiveness.

In the process of internationalization, the Chinese government has promoted international cooperation and exchange in medical education. On one hand, it has strengthened partnerships with foreign medical institutions to introduce advanced educational concepts and methodologies. On the other hand, China has sought to increase the international competitiveness and influence of its medical education system. Additionally, the government has promoted international cooperation projects, such as Sino-foreign joint educational programs and academic exchanges, which have provided broader opportunities for the development of Chinese medical education.

# 3. Factors Influencing Modern Chinese Medical Education

## 3.1. Political Factors

Political factors have had a profound impact on the development of modern Chinese medical education. Government policies, educational reforms, and the development of the healthcare system all directly influenced the direction and pace of medical education.

In the late Qing period, the government enacted policies and regulations to promote the introduction and development of Western medical education. During the Republican era, while the government held different attitudes toward Chinese and Western medical education, it nonetheless promoted reforms and the development of medical education. After the founding of the People's Republic of China, the government placed great emphasis on the development of medical education, reforming the educational system, optimizing resource allocation, and improving the quality of education.

## 3.2. Economic Factors

Economic factors were also crucial to the development of modern Chinese medical education. Economic growth provided the necessary material support and financial backing for medical education, while also driving the rapid development of the healthcare sector and increasing demand for medical professionals.

In the late Qing period, with economic development and social progress, there was a growing demand for medical and healthcare services, which drove the introduction and development of Western medicine. In the Republican era and after the founding of the People's Republic of China, rapid economic development and deepening healthcare reforms provided greater financial support and resource investment, contributing to the growth of medical education and the improvement of training quality.

### 3.3. Cultural Factors

Cultural factors also played a significant role in shaping modern Chinese medical education. Traditional Chinese culture, with its emphasis on ethics and humanistic care, had a profound impact on medical education. Meanwhile, the introduction of Western medicine presented both challenges and opportunities for Chinese medical education.

In traditional Chinese culture, medicine was viewed as a form of humanistic care and moral responsibility. Therefore, medical education focused not only on imparting knowledge and skills but also on fostering medical ethics and the humanistic aspects of medicine. As Western medicine was introduced and medical science continued to evolve, medical education also began to emphasize scientific thinking and innovation. The influence of these cultural factors resulted in a unique style and characteristics of modern Chinese medical education.

## 4. Implications of Modern Chinese Medical Education for Contemporary Education

### 4.1. Strengthen International Cooperation and Exchange in Medical Education

The internationalization trend in modern Chinese medical education suggests that contemporary medical education should strengthen cooperation and exchange with internationally renowned medical institutions, introducing advanced educational concepts and methods to improve China's competitiveness and global influence in medical education.

In the process of internationalization, we can adopt best practices from abroad, such as case-based learning and problem-oriented teaching, to advance reforms and innovation in China's medical education system. Additionally, participation in international cooperation projects, such as Sino-foreign joint programs and international academic exchanges, can provide more opportunities for the development of Chinese medical education.

### 4.2. Emphasize Practicality and Innovation in Medical Education

Modern Chinese medical education's focus on integrating theory and practice serves as a reminder that contemporary medical education should prioritize the development of students' practical abilities and innovative thinking. By enhancing clinical internships and case studies, we can improve students' practical skills and problem-solving abilities. Furthermore, fostering critical thinking and encouraging students to explore new areas of medical knowledge and methods are essential components of modern medical education.

### 4.3. Promote the Diversification of Medical Education

The diverse and coexisting nature of modern Chinese medical education suggests that contemporary medical education should promote the development of a diversified education system. This would encourage the coexistence and integration of Chinese and Western medicine, traditional and modern approaches, as well as public and private institutions, creating a richer and more flexible educational framework.

### 4.4. Strengthen the Integration of Medical Education and Healthcare Development

Modern Chinese medical education's close alignment with healthcare needs highlights the importance of linking education to the healthcare sector. Contemporary medical education should aim to meet the demands of the healthcare system, ensuring that talent cultivation aligns with the sector's evolving needs. By doing so, we can enhance the overall quality and relevance of medical education, ensuring that it serves both educational and practical goals.

## 5. Conclusion

The development of modern Chinese medical education has undergone profound changes, transitioning from tradition to modernity and from a closed system to an open

one. Through this historical study, we can see how political, economic, and cultural factors have deeply influenced the direction and pace of medical education development. The characteristics and influencing factors of modern Chinese medical education also offer valuable insights for contemporary medical education.

In the future, we should continue to explore and practice the internationalization of medical education, emphasize its practical and innovative aspects, promote diversification, and strengthen the integration of education with healthcare development. Through these efforts, we can inject new energy into the development of Chinese medical education, bringing it to a higher level, while also contributing Chinese wisdom and solutions to global medical education.

## References

1. J. Welden and L. Ac, "The fall of Chinese medicine," *Pac. J. Energy Med.*, p. 2.
2. R. C. Croizier, "Medicine and modernization in China: An historical overview," in *Med. Chinese Cult.: Compar. Stud. Health Care Chinese Other Soc.*, pp. 21–36, 1974.
3. D. M. Kaufman, "Teaching and learning in medical education: How theory can inform practice," in *Understanding Med. Educ.: Evid., Theory, Pract.*, pp. 37–69, 2018.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of SOAP and/or the editor(s). SOAP and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.