

# The Integration of Humanistic Education and Diagnostic Teaching Under the Background of New Medical Science: The Combination of Theory and Practice

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**Abstract:** Medical talent cultivation should focus on cultivating students' moral literacy and sense of social responsibility. Implementing humanistic education in medical teaching can help cultivate the patriotism of medical students and shape correct values. The relationship between humanities education and diagnostic teaching is close. Humanities education can provide value guidance and ideological education for diagnostic teaching. In diagnostic teaching, humanities education can be implemented effectively, helping students better clarify learning goals, better cope with challenges in future medical practice and become medical professionals with good professional ethics and social responsibility. This article explores the relationship between humanistic education and diagnostic teaching and elaborates on the practical methods of integrating humanistic education in the process of diagnostic teaching.

**Keywords:** Humanities education; Diagnosis teaching; Educational practice

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## 1. Introduction

The cultivation of medical talents should focus on cultivating students' moral literacy and sense of social responsibility to cultivate well-rounded and well-rounded talents for the whole of society <sup>[1]</sup>. Humanities education, as one of the important directions of higher education reform, aims to achieve this goal through curriculum design and teaching process <sup>[2]</sup>. At the same time, humanistic education also pays attention to and serves students, continuously improves their moral cultivation, cultivates medical humanistic spirit, cultivates students' social identity, enhances their sense of social responsibility and cultivates students to grow into excellent medical talents <sup>[3]</sup>. Traditional medical humanities education can enhance the professional identity and humanities literacy of medical students and medical personnel <sup>[4,5]</sup>.

As the successor of China's future health industry, the shaping of the thoughts and values of medical

students has a profound impact on society <sup>[6]</sup>. Implementing humanistic education in medical teaching helps cultivate medical students' patriotism and shapes their correct values <sup>[7]</sup>. Diagnosis is a discipline that focuses on transitioning from medical basics to clinical practice <sup>[8]</sup>. As an entry-level professional course in clinical medicine, the goal is to cultivate students' diagnostic and problem-solving abilities. In the teaching process of diagnosis, teachers should not only impart theoretical and practical knowledge but also implement humanistic education. It can strengthen medical humanistic care education and cultivate compassionate doctors. At present, humanities education is receiving increasing attention in medical education both domestically and internationally and there are also continuous attempts to cultivate medical humanities education methods <sup>[9-13]</sup>.

## **2. The relationship between humanistic education and diagnostic teaching**

Humanities education plays an important role in diagnostic teaching, leading students to establish correct values and improving their ideological and moral realm. It guides students to think about social issues and ethics based on practical situations and cultivate their sense of social responsibility and civic consciousness through classroom professional knowledge lectures, typical case analysis and other methods. Clinical doctors face higher moral expectations <sup>[14]</sup>. Therefore, integrating medical humanities education into higher education has become an important goal <sup>[15]</sup>. This has emerged with the transformation of modern medical models and the continuous development of medical and health care. As the core content of education, cultivating students' moral character and personality should be integrated throughout the education process. Under the guidance of noble morality, medical students who shoulder heavy responsibilities can work harder in clinical medicine learning, strive to learn for greater ideals and form a self-driving force, which is reflected in their learning. Only by deeply understanding "Health is related to life and life is entrusted to each other" can medical students strive to fulfill their vows in their future careers, cultivate noble professional ethics and qualities and thus improve their comprehensive quality and sense of social responsibility.

Mastering solid diagnostic expertise is the foundation for becoming an outstanding clinical physician. Only with a solid foundation of medical knowledge can an early and accurate diagnosis be made, laying the foundation for subsequent precise treatment. Integrating humanistic education into explaining professional knowledge and making students aware of the importance of diagnosis can help stimulate students to work hard to learn professional knowledge and promote improving professional knowledge and medical technology through their internal drive. In the case internship process of each system, the education of medical ethics and relevant national policies combined with specific cases can enable students to feel the progressiveness of the government and the country in the actual clinical environment while cultivating their sense of responsibility and professional ethics. Integrating humanistic education into students' actual learning and clinical internship practice can help medical students become qualified clinical doctors.

Teachers play a crucial role in shaping and cultivating medical students' correct values and professional spirit through classroom teaching and clinical internships. In teaching, teachers should not only focus on imparting knowledge and cultivating abilities but also pay attention to cultivating students' professional ethics, guiding students to love patients and forming a patient-centered concept. Regardless of whether the examinee is a classmate or a patient, they should understand respect and care. Various diseases often affect patients' quality of life, and sometimes, patients and their families may face enormous psychological pressure. During internships, students are guided to think from multiple perspectives, cultivate empathy, understand them from the patient's perspective and become warm future medical workers.

### **3. Practical experience in integrating humanistic elements into diagnosis teaching**

As a diagnostic teacher, the first thing to do is to respect and cherish students from the heart, teach according to their aptitude, constantly encourage students and cultivate their clinical diagnostic thinking ability, independent thinking ability, scientific innovation ability and critical spirit. In the course, teaching students the skills of doctor-patient communication and cultivating their comprehensive qualities is also necessary. By continuously encouraging students to transform knowledge into skills through medical practice, medical teachers can experience the happiness of helping patients and serving the people, gain a deeper understanding of the meaning of medicine, actively participate in the entire teaching process, activate thinking, tap potential and promote the development of humanistic work.

#### **3.1. Integrating humanistic elements into teaching content**

Teachers should continue to enrich professional courses' teaching content and presentation forms, cleverly integrate humanistic elements, shape medical ethics and elevate ideological levels while improving student learning effectiveness. For example, introducing discussions on social issues and ethics in the classroom, helping students think about the relationship between the practical application of diagnostics and social responsibility and cultivating students' sense of social responsibility. In the internship of neurological cases, the government advocates for increased construction of rehabilitation centers in various regions for elderly patients with neurological diseases. The government has also introduced a major illness medical insurance policy for critically ill patients to reduce their economic burden. Implementing these measures improves patients' lives and reflects the care and respect of society.

This teaching strives to find and integrate humanistic education elements in teaching various diagnostics chapters. In the study of symptomatology, the content of consultation, commonly used consultation methods and techniques in special situations, are taught based on symptoms and cases. Teachers inspire students to seek clues for disease diagnosis through symptoms, embodying a humanistic mindset and a sense of care and service. Doctors should strengthen communication with patients, use easy-to-understand language to inquire about their condition and provide health education to maintain a healthy doctor-patient relationship.

The whole-body physical examination is comprehensively integrated into segmented examinations in a certain order, requiring an organized and complete completion. In this learning process, it is necessary to guide students to develop the ability to make diagnostic hypotheses and establish correct clinical diagnostic thinking. When students learn from each other for consultation and physical examination, teachers should pay attention to guiding the students to learn to care for their classmates such as adjusting the ambient temperature to the appropriate temperature, rubbing hands warm before the examination and covering the stethoscope to reduce discomfort during the examination. Teachers should also pay attention to the tension caused by consultation and privacy protection issues. In the autumn semester, the course of studying electrocardiograms involves each student taking an electrocardiogram for their peers. The lead connections of the electrocardiogram can start with the limb and then the chest to minimize exposure to cold air. In the process of teaching demonstration, it is also important to maintain the dignity of the students being tested, alleviate their tense emotions and guide other students to respect and appreciate their contributions and contributions.

In the study of experimental diagnostics, the collection and processing of specimens, determination of reference values, factors and control of test quality, as well as correct interpretation of test results, can guide students to establish correct diagnostic thinking in combination with clinical practice, and adjust effective interventions or treatments on time based on the dynamic test results of patients. Inspire students to further search for diagnostic clues through auxiliary examination results, issue reasonable examinations in future

clinical work and timely learn new progress, knowledge and methods in testing.

In the chapter on medical record writing, based on the consultation, the first-hand information obtained from the consultation is further written into professional documents, further cultivating rigorous clinical thinking in the writing process. By integrating the symptoms, signs and laboratory tests of common diseases through specific clinical cases and conducting case analysis, students can gain a preliminary understanding of the diagnostic steps, clinical thinking patterns and basic principles of the disease.

### **3.2. Integrating humanistic elements into teaching formats**

In terms of teaching forms, a flexible use of diverse teaching methods can enhance humanistic qualities while imparting knowledge.

- (1) Theoretical teaching emphasizes basic theories and knowledge, incorporates discussion-based teaching methods and reflects medical dialectical thinking.
- (2) Case study teaching runs through real clinical cases while teaching classroom theory. Through case analysis, students can apply the knowledge they have learned to solve practical problems and cultivate their thinking, judgment and problem-solving abilities by combining case analysis to explain the important points of this lesson. In the study of clinical real cases, emphasis is placed on medical humanistic care, enhancing students' dedication to medicine and caring for patients.
- (3) During questioning interaction between the patients and the medical students, in classroom learning, teachers ask open-ended questions and encourage students to participate actively in discussions and thinking, fully guide students to think about the methods of questions and stimulate their thinking through questioning. Teachers should guide students to think actively and cultivate their ability for self-directed learning, guiding them through problems. In addition, teachers guide students to learn how to ask themselves and others and cultivate their critical clinical thinking and problem-solving abilities.
- (4) Teachers can fully utilize information technology by creating courseware with illustrations and text, inserting clinical case-related videos, and enhancing learning interest and emotional understanding.
- (5) After-class question answering and interaction are carried out through the end network teaching platform. Teaching videos, knowledge expansion, after-class exercises, thinking questions, etc., are provided on the social media, WeChat official account for students to learn and expand their professional and popular science knowledge independently.

## **4. Conclusion**

The relationship between humanistic education and diagnostic teaching is close. Integrating humanistic education into diagnostic teaching can help students better understand their learning goals, stimulate their internal drive, better cope with future medical learning and practice challenges, and better cultivate them into medical professionals with good professional ethics and social responsibility. Teachers should extensively explore humanistic elements, enrich teaching methods, and enhance teaching effectiveness.

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