Review Article

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Exploration and innovation in integrating medical humanities into undergraduate Medical English education

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Abstract: In the new era of socialism with Chinese characteristics. China's health sector has entered a transformative stage, demanding higher standards for cultivating medical professionals. This paper examines the critical role of medical humanities education and identifies the gap between current humanistic competencies of medical students and societal expectations. Focusing on the unique advantages of Medical English courses in fostering humanistic qualities, we propose a series of innovative strategies. These strategies aim to cultivate well-rounded medical professionals with enhanced empathy, ethical awareness, and cultural literacy, thereby bridging the divide between medical science and humanistic values.

Keywords: medical humanities; Medical English; undergraduate education; blended learning; humanistic care

Introduction

Education serves as the cornerstone of national development under the socialist framework with Chinese characteristics, China's evolving healthcare landscape necessitates medical professionals who embody not only scientific expertise but also strong ethical convictions, cultural confidence, and humanistic sensitivity. The fundamental aspect of nurturing people lies in fostering moral integrity [1]. Medical English, a mandatory course in undergraduate medical education, inherently integrates linguistic proficiency

The essence of medicine transcends mere technical mas-

tery. As articulated by Dr. Edward Livingston Trudeau, "To

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with humanistic values. By exposing students to authentic medical scenarios, international ethical standards, and culturally diverse patient narratives, Medical English plays a vital role in enhancing students' empathy, cross-cultural communication, and ethical reasoning - key components of medical humanistic literacy. Unlike previous studies that tend to address medical humanities from either a theoretical or clinical standpoint, this paper uniquely emphasizes the interdisciplinary role of Medical English as a bridge between language instruction and humanistic education. It proposes an integrated pedagogical framework that not only facilitates language acquisition but also cultivates moral insight, cultural sensitivity, and professional identity among medical students. Strengthening humanistic education within this discipline is pivotal for nurturing empathetic practitioners capable of addressing contemporary challenges in patient care, doctor-patient relationships, and medical ethics.

Overview of medical humanities

Medicine as a humanities discipline

has not received sufficient attention. There has been an excessive emphasis on diseases while neglecting patients, their subjective experiences, and psychological feelings, and

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cure sometimes, to relieve often, to comfort always," [2] medicine is fundamentally a human-centered endeavor. "Health and life are entrusted to us," and medicine is a discipline that serves "people." Edmund D. Pellegrino, a pioneer in medical humanism, emphasized that medicine represents "the most humane of sciences, the most empirical of arts, and the most scientific of humanities." The purpose of medicine is to study diseases, but the patients that clinicians face are individuals with emotions and dignity. With the development of time, modern medical technology has continuously advanced, saving countless lives. However, with the rise of rationalism, the humanistic spirit in medicine

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even challenging social and ethical norms. In the current context of medical development, integrating the scientific spirit of medicine with its humanistic spirit, and cultivating healthcare professionals with good humanistic literacy, rich in humanistic care, and high standards of medical service, has become the primary goal of medical discipline development.

The imperative of medical humanities education

Contemporary medical education increasingly recognizes the need to cultivate professionals adept in both technical and humanistic competencies. Studies indicate that clinicians with interdisciplinary training in humanities demonstrate superior patient communication, ethical decisionmaking, and cultural sensitivity [3]. However, in current medical education, there is a general emphasis on the teaching of medical knowledge and technical skills, with a lack of focus on developing the humanistic qualities of medical students. This may be one of the reasons for the deteriorating relationships between healthcare providers and patients. The field of medical humanities involves understanding human nature, perceiving the suffering of disease, self-awareness, professional ethics, and interpersonal communication and interaction, among other aspects. It is a key component in the quality education of future doctors, as it enhances their humanistic literacy, cultivates a correct ethical perspective, deepens their understanding of the social and cultural contexts of medical practice, and nurtures wellrounded medical professionals.

In Western countries, medical humanities has seen significant development as an interdisciplinary field encompassing philosophy, law, history, cultural studies, anthropology, religion, and art [4]. Since the 1980s, many medical schools in China have increased their teaching and research in medical humanities, with many institutions offering courses related to medical humanities, such as the history of medicine, dialectics of nature, and medical ethics. However, the current medical humanities courses in various universities are established independently, lacking a unified standard and organization, and some institutions do not place sufficient emphasis on medical humanities education. According to some studies, humanities subjects account for less than 5 % of undergraduate medical education. Additionally, research indicates that 55.26 % of students choose humanities courses merely to earn credits [5]. Courses related to medical humanities, such as medical

ethics and law, doctor-patient communication, and medical social sciences, are often offered as electives and are typically taught separately without a comprehensive consideration of their place in the curriculum. Moreover, most lecturers in medical humanities have primarily a social science background, leading to a disjointed approach in teaching medical students. Given the urgent need for the development of medical humanities, there is still a long way to go in this field in China [6].

The current humanistic qualities of medical students are not satisfactory

Although recent years have seen increasing emphasis on the cultivation of medical humanities in China's medical education reform, the overall humanistic qualities of medical students remain inadequate. The main issues are reflected in the following four areas.

Low overall level of humanistic qualities among medical students

There is a noticeable lack of humanistic care among some medical students. On the one hand, certain students demonstrate a utilitarian mindset, with insufficient awareness of professional ethics, patient emotions, and social responsibility. They often lack essential empathy and communication skills [7]. On the other hand, the separation of arts and sciences in secondary education leads most medical students to focus heavily on science subjects such as physics, chemistry, and biology before entering university. This results in a weak foundation in the humanities, which hinders the holistic development of their values.

Lagging development of medical humanities curriculum

Compared to developed countries like the United States and the United Kingdom, and even some Asian nations such as Japan, Chinese medical universities are still behind in the development of humanities-related courses [6]. While some institutions have started to introduce medical humanities into their curricula, the number of such courses remains limited, and the overall structure is incomplete. Moreover, course content tends to be outdated and fails to address the evolving demands placed on medical professionals in the modern era [8]. This restricts the depth and breadth of humanistic education and prevents the formation of a systematic and effective training mechanism.

Monotonous teaching methods and insufficient humanistic literacy among teachers

Currently, courses like Medical English primarily rely on traditional lecture-based instruction focusing on knowledge transmission. They often lack engaging teaching strategies such as scenario-based learning and interdisciplinary discussion, which are essential for cultivating humanistic thinking. In addition, many clinical instructors have limited exposure to the humanities and do not fully grasp humanistic principles, making it difficult for them to integrate these values organically into their teaching. As a result, educational effectiveness is weakened, and students struggle to internalize humanistic values through immersive learning.

Evaluation systems lacking a humanistic orientation

Medical education continues to rely heavily on assessments that emphasize knowledge acquisition and technical skills, with insufficient focus on evaluating students' humanistic development. The current evaluation system pays little attention to critical competencies such as emotional awareness, ethical reasoning, teamwork, and communication. This shortfall makes it difficult for students to establish sound humanistic values and reduces their motivation to improve in these areas throughout their academic journey.

Advantages and reflections of Medical English teaching in humanistic quality development

The discipline of Medical English itself carries humanistic qualities

English teaching not only imparts language knowledge but also integrates rich humanistic elements, creating a platform that promotes both language learning and the development of humanistic qualities. This platform encompasses various aspects such as culture, worldview, values, philosophy of life, aesthetics, and ethics. The humanistic approach to language teaching emphasizes the cultivation of humanistic qualities in language instruction. The medical field also places great importance on humanistic care, with "benevolence" at its core, aligning with the goals of English teaching. Through English learning, students not only enhance their cultural literacy but also increase their interest and self-cultivation in the humanities.

Specifically, Medical English teaching provides students with authentic materials such as clinical case studies, medical ethics discussions, and international health guidelines. These resources introduce students to real-world medical scenarios involving compassion, patient autonomy, and moral reasoning, thereby helping them internalize the ethical and humanistic dimensions of medical practice.

As their humanistic qualities improve, medical students' abilities in understanding, thinking, analysis, and expression are also strengthened, which helps to enhance the effectiveness of university English teaching and achieve the dual goal of improving both teaching and students' humanistic qualities.

In the early stages of medical education, students are at a critical period for shaping their worldviews, life perspectives, and values. The knowledge and skills they acquire will directly impact their future medical careers. In today's society, doctor-patient relationships and medical ethics are of significant concern, and these issues are closely related to students' humanistic qualities.

Medical English courses that incorporate cultural comparisons and multi-lingual communication scenarios also help students develop intercultural empathy and a global medical perspective, preparing them to handle diverse patient needs and ethical complexities.

Through English teaching, medical students can not only improve their language skills but also gain a deeper understanding of their own cultural characteristics, enhancing their identification with and sense of responsibility towards their national culture. This helps to broaden their thinking, reshape their values, improve their aesthetic and judgment abilities, and enhance their self-cultivation in social and behavioral habits. In an era of globalization, these qualities are crucial for medical students.

The English class offers space for improving humanistic qualities

Compared to the rigidity of medical professional courses, English teaching places more emphasis on individual differences and personalized growth. Many medical schools use a variety of flexible teaching methods in their English instruction, such as group discussions, collective activities, and role-playing, which help medical students express their personal ideas and showcase themselves.

These interactive methods uniquely contribute to the development of humanistic qualities by fostering empathy through perspective-taking in role-plays, encouraging openmindedness and respect in group discussions, and promoting cooperation and shared responsibility during collective activities. For instance, when students simulate doctorpatient interactions in English, they learn to communicate with compassion and attentiveness – skills essential for humanistic medical practice.

In English classes, the exchange of thoughts and the collision of ideas are valued, and each student's cultural learning, perceptions, and viewpoints are respected. This is crucial for enhancing the humanistic qualities of medical students. As a continuously offered course in medical schools, university English has a coherent structure that integrates humanistic education into language teaching, fostering critical thinking and collaborative skills. This, in turn, helps students better demonstrate humanistic care in their future medical practice.

Strategies for enhancing medical students' humanistic qualities in undergraduate English teaching

In the past decade, research on the integration of university English and medical humanities has shown a yearly upward trend, with particularly rapid growth in recent years. The exploration of incorporating ideological and political education into undergraduate Medical English courses has been discussed and analyzed from multiple aspects, including reform plans, course objectives, content, and evaluation. This has clarified the importance, feasibility, and necessity of integrating medical humanities into university English teaching [9]. Discussions on teaching models have explored blended learning, flipped classrooms, and the construction of interdisciplinary teaching systems for both required and elective courses [10]. In undergraduate Medical English courses, teachers use various methods and approaches to enhance medical students' humanistic qualities from multiple dimensions.

To enhance clarity and accessibility of the historical review, Table 1 provides a summary of representative studies regarding the integration of ideological and political education into Medical English teaching. This includes

information on the implementation approach, core content, and observed educational outcomes.

Innovative teaching philosophy with a focus on humanistic care

In modern humanistic education, language teaching emphasizes students' emotional development and self-improvement, as well as the cultivation of humanistic qualities. Teachers should recognize that education aims not only to impart knowledge of language, literature, and history but also to inspire medical students to develop a deep sense of humanistic care in their professional fields, fostering a more well-rounded personality. For medical students, learning language is about more than just mastering its practical aspects; it involves critically engaging with the humanistic, historical, social, and life knowledge embedded in language.

English teachers should excel in language skills and have a deep understanding of both Chinese and foreign cultural and historical contexts. They should tailor their teaching to students' needs, integrating humanistic values into language instruction. Additionally, teachers should demonstrate high moral integrity, show genuine care for their students, and build harmonious teacher-student relationships based on sincerity and equality. They should also inspire students' potential, encourage innovation and initiative, and transform passive learning into active participation.

Innovation in teaching content, reconstructing the teaching system

Focusing on the core goal of cultivating medical students with high moral integrity and excellent medical skills, we will use narrative medicine to integrate language and cultural knowledge with medical humanities education. This approach will establish a three-level interactive mechanism to enhance the humanistic qualities of medical students and reform, and optimize the Medical English teaching system.

Table 1: Summary of research on integrating ideological and political education into undergraduate Medical English teaching.

Study, year	Implementation approach	Teaching content	Observed effects
Xue et al. (2025) [11]	Case-based and scenario-driven modules	Doctor-patient communication and ethics	Improved empathy and communication skills
Wu et al. (2025) [12]	Blended online/offline teaching	Medical ethics in global context	Increased cultural awareness and critical thinking
Zheng (2021) [13]	Thematic classroom discussions	Life values and professional identity	Enhanced sense of responsibility and self-reflection
Yang et al. (2019) [14]	Cross-disciplinary integration	History of medicine and health equity	Strengthened humanistic understanding of social health issues

Medical English textbooks cover a wide range of humanistic knowledge, drawing on the people-oriented educational philosophies of developed countries. These materials promote critical thinking and analysis, enhancing students' humanistic qualities and serving as a valuable resource for developing comprehensive humanistic competencies. University English courses encompass various aspects such as society, history, culture, personalities, and daily life, providing rich linguistic and cultural background knowledge that is closely related to everyday experiences. University English teachers can explore the highlights in the textbooks from different perspectives, dimensions, and based on students' levels and interests. They can focus on topics such as interpersonal relationships, the relationship between humans and nature, humans and society, as well as humanistic care, medicine, and humanity. By integrating language learning with humanistic education, teachers can incorporate the attitudes, emotions, worldviews, and values that medical students need into their language courses. This approach enhances their cultural literacy and spiritual development, ultimately nurturing them into more wellrounded healthcare professionals.

Innovation in teaching methods, integrating online and offline teaching resources

The blended learning model, which integrates online and offline teaching, transforms traditional teacher-dominated classrooms into interactive learning environments, positively impacting Medical English education. This model expands the scope of Medical English instruction by combining information technology with teaching, creating a structure that includes pre-class preparation, in-class discussion, and post-class practice. Pre-class and post-class activities are primarily online, while in-class discussions, including faceto-face teaching and group interactions like role-playing and case analysis, are conducted offline. This approach shifts from a teacher-centered to a student-centered model, promoting flipped learning and enhancing students' observation, understanding, and expression skills.

In university English teaching, relying solely on classroom time is insufficient for improving humanistic qualities. Online resources and campus activities have become more influential. According to Vasily Babansky's theory of optimal teaching, appropriate methods should be chosen based on content and activities, such as organizing learning, stimulating cognition, and evaluating effectiveness. In Medical English, combining oral, visual, and practical teaching methods is effective. Oral methods convey knowledge and vocabulary, visual methods (like videos and images) help understand cases, and practical methods (such as clinical simulations and case discussions) allow students to experience emotions and internalize humanistic knowledge. Practical experience, through post-class assignments and clinical practices like scenario simulations and reflective reports, deepens students' understanding of knowledge and skills. It also enhances their language, teamwork, communication, empathy, and narrative skills, which are essential professional humanistic qualities.

Innovation in teaching evaluation, focusing on humanistic orientation

In Medical English teaching, the evaluation system should fully play its role in guiding, motivating, diagnosing, and improving. The evaluation should particularly focus on the professional characteristics of medical students and emphasize humanistic education, including key indicators such as students' attitudes, teamwork, communication skills, and self-learning abilities.

Medical students, as future healthcare providers, possess unique professional characteristics such as a strong need for empathy, precise communication, ethical judgment, clinical reasoning, and an ability to work in multidisciplinary teams under pressure. These attributes directly influence how evaluation should be structured - prioritizing formative assessments that highlight reflective thinking, communication scenarios, collaborative tasks, and ethical case discussions over purely summative language profi-

By aligning assessment methods with these traits, such as through narrative writing, role-plays, peer feedback, and portfolios, the evaluation process itself becomes a channel for reinforcing humanistic competencies.

Conclusions

In summary, under the evolving context of current medical models and ethical concepts, it is particularly urgent to strengthen the professional ethics of medical personnel and enhance the humanistic cultivation of medical students. The medical challenges faced by Chinese society are not limited to the biomedical technology level; more critically, there is a need to reinforce the humanistic elements in medical education and cultivate medical professionals with a sense of humanistic care. Humanistic education for medical students should not be confined to political courses but should be a shared responsibility across multiple disciplines, including foreign languages.

Among these, Medical English teaching plays a distinctive and integrative role, as it bridges language acquisition, cross-cultural understanding, and ethical awareness. Through exposure to authentic medical contexts and reflective discourse, students can develop both linguistic proficiency and humanistic sensibility, which are essential for modern clinical practice. Integrating medical humanities into undergraduate Medical English courses can effectively promote the combination of medical science and humanistic spirit, nurturing medical talents with excellent professional qualities and humanistic care.

Although the present study adopts a conceptual and qualitative approach, it lays a theoretical foundation for future empirical validation. To assess the effectiveness of this educational approach, subsequent research should employ evidence-based methods such as classroom interventions, surveys, interviews, or longitudinal studies that track the impact of Medical English teaching on students' humanistic competencies and professional development.

Future research may explore empirical studies on the impact of Medical English pedagogy on humanistic development, evaluate assessment models rooted in reflective practice, and investigate the interdisciplinary collaboration between English educators and medical humanities scholars. Only by fully embodying humanistic care in medical practice and enhancing the value of medical humanities can medicine truly radiate the light of humanity.

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Use of Large Language Models, AI and Machine Learning

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