

Research Article

Medicine-Humanities Integrated Education: Pathways to Enhanced Quality and Future Prospects

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Abstract

Clinical postgraduates, serving as the cornerstone of medical education, healthcare delivery, and scientific research, must possess strong humanistic qualities. These qualities are vital not only for their personal and professional development but also for elevating the standard of healthcare services and improving public well-being. This paper presents a systematic and coordinated reform initiative targeting the curriculum system, teaching methodologies, and evaluation mechanisms. It aims to explore effective strategies for implementing medicine-humanities integration education. The objective is to cultivate senior medical professionals who are equipped with profound medical knowledge, a broad humanistic spirit, empathetic care, and proficient research capabilities. By continuously refining this training model, the reform seeks to supply society with outstanding medical talents who excel in advanced clinical skills, robust research innovation, and high ethical standards. Ultimately, this endeavor contributes to enhancing healthcare quality, optimizing the service system, and supporting the realization of the "Healthy China" strategy.

Keywords

Medicine-Humanities Integration, Postgraduate Education, Educational Quality, Clinical Competency, Humanistic Literacy

1. Introduction

Clinical postgraduate medical education deeply integrates clinical practice with scientific research, aiming to cultivate future elite physicians who can both address complex clinical issues and drive medical innovation. It serves as the core engine for high-quality development in the healthcare industry and is crucial to the growth of individual physicians. By continuously optimizing training models, it supplies society with outstanding medical talents who possess "advanced clinical skills, research capabilities, and high medical ethics," thereby improving the quality of healthcare, optimizing the medical and health service system. However, this field currently faces pressing challenges: training programs often

overemphasize technical skills like surgery and diagnosis while lacking systematic design for cultivating humanistic literacy in areas such as doctor-patient communication and bioethics [1]. Furthermore, postgraduates frequently demonstrate insufficient clinical competency, exhibiting narrow clinical reasoning and a lack of humanistic care in complex cases, failing to meet modern healthcare's demand for "whole-person care".

Currently, the field of clinical medical postgraduate education faces pressing practical challenges. On one hand, training programs are overly focused on skill development such as surgical procedures and disease diagnosis, while

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lacking systematic design in cultivating humanistic qualities like doctor-patient communication and bioethics. On the other hand, graduate students often exhibit deficiencies in clinical practice, manifesting as simplistic clinical thinking and a lack of humanistic care when dealing with complex cases. This makes it difficult to meet the demands of modern healthcare for "holistic patient care". [2] Against this backdrop, the educational paradigm of "Medicine-Humanities Integration" has gained prominence as a potential solution to bridge these gaps. By fostering a more holistic development of clinical competency alongside humanistic literacy, this approach seeks to better align postgraduate training with the evolving needs of modern medical practice. In this context, medicine-humanities integrated education has emerged as a timely and necessary response.

2. Evolution of Medicine-Humanities Integrated Education

The interdisciplinary integration of medicine with the humanities and social sciences represents both an intrinsic demand of medical progress and a critical pathway for enhancing the overall quality of healthcare. This convergence yields multidimensional benefits: the coupling with literature, through narratives of illness and human experience, cultivates empathy among practitioners; engagement with philosophy fosters critical reflection on the essence of life and the value foundations of medicine. [3] thereby mitigating the risks of technological alienation; and the incorporation of ethics provides an essential moral framework for navigating complex clinical dilemmas, balancing individual patient interests with broader societal equity.

The conceptual underpinnings of "Medicine-Humanities Integration" were largely consolidated in the late 20th century, pioneered through curriculum reforms at influential institutions such as Harvard and Columbia Universities. [4] This educational paradigm emphasizes a deep, synergistic fusion that transcends traditional disciplinary boundaries, systematically embedding insights from literature, ethics, sociology, and related humanities throughout medical training. The objective is to cultivate well-rounded professionals equipped not only with technical mastery but also with a profound humanistic sensibility.

Theoretically, this integration enriches the conceptual framework of medical education, moving beyond a predominantly technocratic model and offering novel perspectives for constructing a distinctive theory of medical education. Practically, it significantly enhances the clinical competency and humanistic literacy of medical graduates. Here, clinical competency is defined comprehensively to encompass not only diagnostic and therapeutic skills but also integrated capabilities such as effective communication and ethical reasoning. Concurrently, it fosters a professional character grounded in respect for life and patient dignity, thereby lay-

ing a solid foundation for training high-caliber medical talent suited to the demands of a new era.

In China, the promotion of medicine-humanities integration began as early as the 1990s, which accelerated the institutionalization of medical humanities as an academic discipline. Scholars like Professor Zhang Daqing from the Institute of Medical Humanities at Peking University have made substantial contributions through systematic research in medical history and humanities, facilitating the permeation of humanistic perspectives into medical education. [5] The specific term "Medicine-Humanities Integration" gained prominence from teaching reform initiatives within Chinese medical schools in the early 21st century. Following 2010, mandates from the Ministry of Education and the National Health Commission, embedded within the "Standards for Undergraduate Medical Education," explicitly required the inclusion of humanities and social sciences, encouraging institutions to explore integrative models. [6] A significant milestone was reached around 2018 when leading medical schools, such as the Shanghai Jiao Tong University School of Medicine, formally incorporated "Medicine-Humanities Integration" into their strategic reform agendas, clearly signaling a committed direction for systemic educational transformation.

3. Pathways for Integrated Medicine-Humanities Education

To advance integrated medicine-humanities education for clinical postgraduates in China, it is essential to establish a systematic and culturally-grounded framework. This requires synergistic, systemic reforms across multiple dimensions, including the curriculum, pedagogical methods, and evaluation mechanisms.

3.1. Developing Integrated Curriculum Clusters and Modules

An integrated, modular curriculum cluster combining medicine and humanities should be established to systematically embed humanistic perspectives into core medical education. This can be achieved by introducing interdisciplinary subjects—such as history of medicine, philosophy of medicine, and narrative medicine—into clinical training programs, using case-based discussions and literary analysis to explore ethical, social, and psychological dimensions of care. Curriculum restructuring should adopt a three-tier framework consisting of required courses, elective courses, and practice-based modules. Foundational required courses (e.g., "Medical Ethics and Philosophy of Life," "The Art of Patient Communication") provide essential theoretical grounding. Specialized electives (e.g., "Narrative Medicine," "Social Psychology in Psychiatry") allow for personalized learning aligned with career interests. [7] Importantly, disciplinary

boundaries must be bridged by integrating humanistic content directly into clinical teaching—for example, incorporating ethical decision-making case studies into surgery courses or patient narrative interpretation into diagnostics training—thus enabling a seamless blend of technical and humanistic learning.

Immersive humanistic experiences within clinical practice are crucial. The implementation of a "narrative medicine record" system—which requires postgraduates to complement standard clinical notes with patient stories and psychosocial contexts—combined with regular narrative case sharing and structured peer feedback, can significantly enhance reflective capacity. [8] In high-stakes specialties such as Emergency Medicine and Oncology, situational simulations (e.g., end-of-life decision-making, medical dispute mediation) help strengthen applied humanistic competencies. Furthermore, leveraging indigenous resources is key to meaningful localization: exploring humanistic concepts from Traditional Chinese Medicine texts (e.g., "benevolence in medicine," "harmony between nature and human") and facilitating discussions on China-specific issues—such as building trust within a tiered healthcare system or advancing equity in primary care—ensure that integration remains contextually relevant and responsive to local clinical realities.

Current global scholarship reflects diverse theoretical and practical approaches. The theory of "Narrative Medicine," as pioneered by Rita Charon, emphasizes building narrative competence—the ability to absorb, interpret, and respond to patients' stories—as a means to bridge the emotional distance between clinicians and patients. Charon contends that illness narratives convey psychological suffering and lived experiences that transcend mere symptomatology; true healing, therefore, involves "seeing the person" rather than just "treating the disease." This philosophy has become a cornerstone of contemporary medical humanities education. While narrative medicine fosters empathy through story interpretation, medical ethics addresses moral dilemmas in clinical decision-making, and medical sociology examines health disparities through structural analysis. Together, these disciplines provide a robust theoretical and practical foundation for integrated education.

3.2. Innovating Teaching Methodologies

Teaching methodologies should transition toward interactive, experiential approaches—such as case-based learning, clinical simulation, and reflective writing. In particular, narrative medicine techniques, including close reading of literature and creative writing about illness, help cultivate empathy and strengthen reflective practice. During clinical rotations, formats like "humanities ward rounds" and "patient life story interviews" can further enhance hands-on training in humanistic care.

3.2.1. Case-Based Teaching

This approach utilizes authentic clinical and humanistic cases to guide students through analysis, discussion, and decision-making processes, enhancing their problem-solving and critical thinking abilities. Instructors may select representative cases involving complex communication, ethical conflicts, or historically significant contexts, prompting learners to integrate knowledge across disciplines. For instance, in a group discussion on the ethics of organ allocation, students can analyze relevant principles, legal frameworks, and societal implications, propose equitable solutions, and engage in structured ethical reflection—strengthening both conceptual understanding and practical application.

3.2.2. Scenario Simulation Teaching

By recreating realistic clinical settings where students assume roles such as physician or patient, this method allows participants to practice communication, diagnostic reasoning, and treatment planning in a controlled environment. It effectively improves both clinical competency and empathetic communication while raising awareness of humanistic care. Simulations may include outpatient consultations or inpatient interactions, enabling instructors to observe and provide feedback on skills such as history-taking, patient education, and shared decision-making. [9] The incorporation of immersive technologies such as Virtual Reality (VR) and Augmented Reality (AR) can further enhance the authenticity and engagement of simulation experiences.

3.2.3. Community and Social Practice Teaching

Hands-on community engagement is essential for bridging theoretical knowledge and real-world practice. Organizing participation in health outreach programs, community volunteer services, and other field-based activities exposes students to a wide spectrum of patient backgrounds and health challenges, fostering empathy and social responsibility. Instructors should provide structured guidance to help students apply humanistic knowledge in improving communication and service quality. Furthermore, encouraging involvement in survey or research projects related to medical humanities—such as patient experience studies or community health needs assessments—can cultivate innovation and applied research skills. Hospitals and academic institutions should establish dedicated platforms for such activities and incorporate humanistic care competencies into formal clinical assessments. [10] Building a sustainable collaborative network among universities, hospitals, and community organizations will help ensure diverse and meaningful practical learning opportunities.

3.3. Enhancing the Evaluation System

Reforming the assessment structure requires the establishment of a multi-dimensional evaluation system that

measures not only professional knowledge but also humanistic literacy—including communication skills, ethical decision-making, and professional attitude. Methods such as Standardized Patient (SP) encounters, peer assessments, and reflective portfolio reviews can provide a holistic appraisal of overall competency. Furthermore, incorporating humanistic education indicators into faculty teaching evaluations will incentivize educators to consistently integrate these elements into their instruction.

3.3.1. Establishing Diversified Evaluation Criteria

A robust evaluation framework for clinical medical education should incorporate diversified criteria that assess both medical knowledge and skills as well as the development of humanistic competencies. [11] These may include theoretical examinations, clinical skills evaluations (e.g., OSCEs), communication ability assessments, humanistic literacy measures (using tools such as surveys, reflective essays, or presentations), and evaluations of student engagement throughout the learning process. For instance, communication skills can be systematically assessed across multiple dimensions—such as interpersonal attitude, communication technique, active listening, and empathy—during simulated encounters or clinical clerkships.

3.3.2. Employing Varied Assessment Methods

In addition to traditional summative examinations, a variety of assessment approaches—such as formative assessment, process-oriented evaluation, self-assessment, and peer review—should be employed to enhance motivation and support continuous learning. Formative assessments, implemented through mini-presentations, case discussions, and structured assignments, offer ongoing feedback for improvement. [12] Process evaluation tracks student engagement, learning attitudes, and collaborative abilities. Self- and peer assessment methods encourage metacognitive awareness and cooperative learning. A blended scoring model (e.g., 40% formative and process evaluation, 60% summative examination or research paper) can provide a comprehensive perspective on student learning outcomes.

3.3.3. Strengthening the Utilization of Evaluation Results

Assessment data should be used not only for grading but also to inform instructional improvement and support student development. Administrators and faculty should systematically analyze evaluation results to identify areas of weakness, adjust teaching content and methods, and optimize the curriculum. Providing students with detailed, constructive feedback helps them recognize their strengths and areas for growth, enabling the formulation of personalized learning plans. For example, if follow-up surveys reveal deficits in communication skills, targeted curricular reforms should be introduced to systematically address these gaps. [13]

4. Conclusion and Outlook

The integration of medicine and humanities represents a pivotal direction for advancing clinical postgraduate education, moving beyond a narrow technical focus to foster the comprehensive development of medical professionals. This paradigm effectively addresses the limitations of traditional, siloed educational models by uniquely cultivating integrated competencies—blending clinical expertise with sophisticated communication skills, ethical reasoning, and professional virtue. As an inevitable trend in medical education reform, it holds significant potential not only to elevate pedagogical outcomes but also to improve healthcare service quality and contribute to more harmonious doctor-patient relationships [14].

Looking ahead, future efforts must focus on several strategic priorities. In an era of rapid technological advancement, particularly in artificial intelligence, reinforcing the humanistic core of medical practice becomes increasingly critical. Furthermore, promoting international comparative studies will allow educational systems to assimilate and adapt global best practices. Through continued, deepened reforms in integration, the goal is to construct a more sophisticated and effective educational ecosystem dedicated to cultivating a new generation of physicians who are both technically excellent and profoundly humanistic.

Abbreviations

VR	Virtual Reality
AR	Augmented Reality
SP	Standardized Patient
OSCEs	Objective Structured Clinical Examination

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Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Wu, Y. N., He, Z., Liu, H., et al. A Study on the Current Status of the Social Application Field of Medical Humanities in China [J]. *Chinese Medical Ethics*, 2024, 37(5): 592-602.
- [2] Zhang, M. H., & Li, H. M. *Theory and Practice of Medical Humanities Education* [M]. Beijing: People's Medical Publishing House, 2020.

- [3] Wang, W. M. An In-depth Analysis and Implementation Strategies of the Fourth Generation of Medical Education [J]. Chinese Journal of Medical Education, 2024, 44(10): 721-725.
- [4] Wang, X. G. An Investigation on the Core Humanistic Competencies of Medical Students [J]. Health Vocational Education, 2022, 40(9): 139-141.
- [5] Liu, Z., Zhang, L., Wang, L., et al. Reform and Practice of Medical Humanities Education in the Intensive Care Unit [J]. China Continuing Medical Education, 2023, 15(12): 10-14.
- [6] Qiu, L. H., Gu, M. X., & Huang, S. R. The Integration Path of Science and Humanities in Narrative Medicine [J]. Journal of Dialectics of Nature, 2022, 44(12): 107-113.
- [7] Liu, F., & Huang, W. M. Construction of an Evaluation Index System for Humanistic Literacy of Medical Students [J]. Chinese Journal of Medical Education, 2022, 42(2): 145-148.
- [8] Smith, H. L., & Jones, P. R. (2021). Integrating Humanities in Medical Education: A Systematic Review. Medical Education, 55(3), 234-248.
- [9] Zhang, X. M., Xiong, D. K., Han, M. M., et al. A Study on Countermeasures for the Evaluation System of Medical Humanistic Literacy [J]. Journal of Jinzhou Medical University (Social Science Edition), 2022, 20(4): 53-56.
- [10] Wang, X. Y., Duan, J., & Zhu, X. M. A Survey on the Current Situation and Countermeasures of Humanistic Literacy Education for Medical Students [J]. Journal of Jinzhou Medical University (Social Science Edition), 2022, 20(3): 43-45.
- [11] Ma, S., Zhu, W. Z., Zhao, Y. M., et al. Reflections and Discussions on Medical Ethics Education for Medical Students Based on Contemporary Doctor-Patient Relationships [J]. China Continuing Medical Education, 2022, 14(13): 162-165.
- [12] Li, B., Bi, X. Q., Lu, Q., et al. Analysis and Reflection on the Current Situation of Interdisciplinary Training in Medical Disciplines [J]. Chongqing Medicine, 2023, 52(8): 1269-1272.
- [13] Chen, H. An Empirical Study on Medical Humanities Education for Clinical Postgraduates: Problems and Countermeasures [J]. Medicine & Philosophy, 2021, 42(3): 51-55.
- [14] Brown, E. R., & Green, T. M. (2020). The Role of Medical Humanities in Developing Professional Identity. Academic Medicine, 95(6), 890-895.