

# Exploring the Role of Narrative Medicine in the Cultivation of Humanistic Spirit among Respiratory Medicine Interns

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**Abstract:** *Objective:* To explore the role of narrative medicine in cultivating the humanistic spirit of respiratory medicine interns. *Methods:* Thirty interns were selected, all of whom were received by the respiratory department of our hospital from September 2023 to June 2024 and underwent narrative medicine teaching. Scores on narrative medicine knowledge, empathy ability, humanistic care ability, and teaching recognition were compared before and after the internship. *Results:* Compared to before the internship, the interns' scores on narrative medicine knowledge were significantly higher after the internship, as were their empathy and humanistic care scores ( $P < 0.05$ ). Among the 30 interns, 25 expressed interest in narrative medicine, and 29 were willing to continue with the narrative medicine teaching model. *Conclusion:* The application of narrative medicine in respiratory medicine internship teaching is highly effective. It cultivates the humanistic spirit of interns, improves their empathy and humanistic care abilities, and is worthy of wider implementation.

**Keywords:** Narrative medicine; Respiratory medicine; Interns; Cultivation of humanistic spirit

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## 1. Introduction

Currently, medical models are constantly innovating and evolving, and doctor-patient conflicts are becoming more prominent. Medical personnel need to master more sophisticated communication skills, especially interns who are about to enter the workforce. Clinical internships are a crucial stage for the comprehensive training of medical students, where their technical skills, logical thinking, professional ethics, and innovative awareness can be developed. Medical students are the future strength of the hospital's medical team, and the quality of clinical teaching is of great importance. Special attention should be paid to cultivating communication skills and humanistic spirit<sup>[1,2]</sup>.

Narrative medicine is a medical competency that emphasizes the practice of narrative abilities. It fully harnesses individual narrative abilities, integrating the universality and professionalism of medicine, and opens

up channels between science and humanity. It is a means of promoting medical humanities and can be applied to cultivate the humanistic spirit of interns<sup>[2,3]</sup>. This study selected 30 respiratory medicine interns as research subjects to explore the effect of narrative medicine on humanistic training, providing a reference for medical teaching.

## 2. Materials and methods

### 2.1. Baseline data

The study began in September 2023 and was completed in June 2024. The subjects were 30 interns received by the respiratory department of Taizhou People's Hospital. The gender composition consisted of 17 males and 13 females, with a minimum age of 22 and a maximum age of 26, and an average age of  $(24.15 \pm 0.86)$  years. The interns were informed and agreed to participate.

### 2.2. Methods

- (1) A training course guidance group was formed, consisting of two or more experts with extensive clinical and teaching experience, and a teacher group of 3 to 6 young and middle-aged teachers. They provided education on narrative medicine, including the writing of parallel medical records, and conducted training on relevant knowledge norms, patient and family communication, and guidelines for writing doctor-patient communication experiences.
- (2) First, the teaching instructor explained to the interns the concepts, principles, applications, and effects of narrative medicine. The teaching employed different narrative perspectives and forms from medical-related films, controlling the relationships between medicine and patients, healthcare professionals, and society, such as in the first episode of the drama *Sheng Ming Yuan* (《生命缘》): "Mother and Son's Fight for Survival." The teacher group discussed various angles such as disease, clinical thinking, doctor-patient relationships, humanistic care, and communication, creating a teaching mind map. In class, the interns observed the mind map and were guided in discussion, helping them understand the healthcare process from the patient's and family's perspectives, and to empathize with patients. Interns were required to reflect on their experiences, consider department practices, identify medical issues and areas for improvement, and write personal reflective diaries. Topics could include their first experiences during training, clinical actions they regret, mistakes made in clinical settings, clinical successes, or memorable moments with instructors. The content included specific timelines, events, emotions, reflections, and meanings.
- (3) The department could purchase narrative books such as *Si Wang Ru Ci Duo Qing* (《死亡如此多情》). The teacher group discussed and selected narrative chapters for the interns to read carefully and conduct reflective writing. Interns could write patient stories based on their own or a relative's experiences, covering the illness experience, the medical process, outcomes, and family reactions. During group discussions, the interns would passionately read aloud their stories to enhance emotional engagement and help them appreciate the emotional journey and difficulties in the healthcare process, awakening their empathy.
- (4) Interns were guided in writing parallel medical records, with two interns paired into one group. Each group interviewed one patient and carefully learned about the patient's entire medical journey,

including all examinations, treatments, nursing care, and interview reflections. Based on these interviews, interns wrote parallel medical records and scripted a narrative play, performing the patient's healthcare experience to deeply understand the patient's inner experience<sup>[4]</sup>.

### 2.3. Observation indicators

- (1) Narrative medicine knowledge: Interns were evaluated via a self-developed questionnaire on their ability to distinguish between illness and disease, understand the relational content of narrative medicine (doctor-patient, doctor-colleague, doctor-society, doctor-self relationships), comprehend narrative medicine types (patient stories, doctor stories, doctor-patient interactions, grand narratives), and recognize methods for improving narrative ability regarding illness (reading narrative texts, writing patient manuals, and writing parallel medical records). The benefits of writing parallel medical records were also assessed (deepening understanding of patient illness, self-reflection on medical behavior, and building harmonious doctor-patient relationships). Each sub-item was worth 10 points, with scores positively correlated with narrative medicine comprehension.
- (2) Empathy ability evaluation: The Jefferson Scale of Empathy for medical students (JSPE-S)<sup>[5]</sup> was used to assess empathy. It consists of 20 items, including 10 positive and 10 reverse-scored items. Each item was rated on a 7-point scale, with a total score ranging from 20 to 140 points. Scores were positively correlated with empathy ability.
- (3) Humanistic care ability evaluation: The Caring Ability Inventory (CAI)<sup>[6]</sup> was used to evaluate understanding, courage, and patience. The scores ranged from 14 to 98 points, 13 to 91 points, and 10 to 70 points, respectively. Scores were positively correlated with humanistic care ability.
- (4) Recognition of narrative medicine teaching: A department-made questionnaire was used to investigate the interns' understanding, interest, and willingness to continue with narrative medicine teaching.

### 2.4. Statistical analysis

Statistical analysis was performed using SPSS 22.0 software. Measurement data were expressed as mean  $\pm$  standard deviation (SD) and analyzed using *t*-tests; count data were expressed as rates and analyzed using chi-squared ( $\chi^2$ ) tests. A *P*-value  $< 0.05$  was considered statistically significant.

## 3. Results

### 3.1. Comparison of narrative medicine knowledge before and after the internship

**Table 1** shows that there was a statistically significant difference in narrative medicine knowledge before and after the internship ( $P < 0.05$ ).

### 3.2. Comparison of empathy ability before and after the internship

Before the internship, the JSPE-S score for the 30 interns was ( $89.46 \pm 10.33$ ); after the internship, the JSPE-S score was ( $121.46 \pm 11.12$ ). There was a statistically significant difference between the two groups ( $P < 0.05$ ).

**Table 1.** Survey results on narrative medicine knowledge (mean  $\pm$  SD, score)

Questionnaire items		Before internship	After internship	<i>t</i>	<i>P</i>
Distinguishing illness from disease		6.85 $\pm$ 1.37	8.76 $\pm$ 0.54	7.104	< 0.001
Narrative medicine relationship content	Doctor-patient	7.16 $\pm$ 1.05	9.34 $\pm$ 0.36	10.757	< 0.001
	Doctor-colleague	6.89 $\pm$ 1.11	9.06 $\pm$ 0.42	10.015	< 0.001
	Doctor-society	5.89 $\pm$ 1.75	8.88 $\pm$ 0.72	8.654	< 0.001
	Doctor-self	6.57 $\pm$ 1.49	9.05 $\pm$ 0.37	8.848	< 0.001
Narrative medicine type content	Patient stories	4.37 $\pm$ 2.13	8.45 $\pm$ 0.84	9.760	< 0.001
	Doctor stories	6.13 $\pm$ 2.17	8.76 $\pm$ 0.65	6.359	< 0.001
	Doctor-patient interaction narrative	6.75 $\pm$ 1.25	8.85 $\pm$ 0.72	7.974	< 0.001
	Grand narratives	5.34 $\pm$ 1.12	8.79 $\pm$ 0.46	15.607	< 0.001
Parallel medical record narrative type	Patient stories	6.37 $\pm$ 1.85	8.76 $\pm$ 0.72	6.594	< 0.001
	Doctor stories	7.14 $\pm$ 1.08	8.93 $\pm$ 0.44	8.407	< 0.001
	Doctor-patient interaction narrative	7.25 $\pm$ 1.14	9.03 $\pm$ 0.52	7.781	< 0.001
	Grand narratives	5.86 $\pm$ 1.62	9.15 $\pm$ 0.33	10.900	< 0.001
Methods to improve narrative ability	Reading narrative texts	5.67 $\pm$ 1.75	9.24 $\pm$ 0.46	10.806	< 0.001
	Writing patient manuals	6.24 $\pm$ 1.06	9.34 $\pm$ 0.28	15.487	< 0.001
	Writing parallel medical records	6.67 $\pm$ 1.22	9.08 $\pm$ 0.48	10.069	< 0.001
Benefits of writing parallel medical records	Deepening understanding of illness	7.45 $\pm$ 0.86	9.11 $\pm$ 0.45	9.367	< 0.001
	Self-reflection on medical behavior	7.52 $\pm$ 0.75	9.28 $\pm$ 0.42	11.215	< 0.001
	Building harmonious doctor-patient relationships	7.64 $\pm$ 0.68	9.34 $\pm$ 0.31	12.459	< 0.001

### 3.3. Comparison of humanistic care ability before and after the internship

Before the internship, the understanding score for the 30 interns was (72.18  $\pm$  10.45), courage score (46.58  $\pm$  7.25), and patience score (46.75  $\pm$  6.75); after the internship, the understanding score was (83.77  $\pm$  10.24), courage score (72.58  $\pm$  10.37), and patience score (61.24  $\pm$  5.85). There were statistically significant differences in CAI scores before and after the internship ( $P < 0.05$ ).

### 3.4. Investigation of teaching recognition

A total of 30 questionnaires were distributed to the 30 interns. Regarding the degree of understanding, 10 interns reported a clear understanding, and 20 reported a deep understanding. In terms of interest, 5 interns expressed moderate interest, while 25 had a strong interest. Regarding the willingness to continue narrative medicine teaching, 29 interns expressed a willingness to continue, with 16 suggesting improvements to the narrative medicine teaching methods. Only one intern was unwilling to continue narrative medicine teaching.

## 4. Discussion

The foundation of narrative medicine is the ability to narrate, which involves understanding highly complex

narrative situations from the perspectives of doctors, patients, colleagues, and the public. It is a form of medical practice that enhances doctors' humanistic spirit, empathy, and professional ethics through such activities <sup>[7,8]</sup>.

In this study, narrative medicine was applied to the clinical teaching of 30 respiratory interns. Through the explanation of narrative medicine by the teaching instructors, the interns developed a clearer understanding of the concept. Compared to the narrative medicine knowledge scores before the internship, the scores after the internship were significantly higher ( $P < 0.05$ ).

The JSPE-S scores of the 30 interns after the internship were also higher than those before the internship. This is consistent with the study by Zhu and Chen <sup>[9]</sup>, in which the empathy level score of the observation group ( $104.89 \pm 12.90$ ) was higher than that of the control group ( $96.57 \pm 11.00$ ), indicating that narrative medicine teaching can enhance the empathy of interns. In narrative medicine teaching, interns were trained to narrate from a first-person perspective. By watching narrative medical films, writing reflective diaries, and reading narrative medicine books, the interns were able to practice empathy by stepping into various roles and experiencing the process of seeking medical treatment. Parallel medical records differ from general clinical records in that they require interns to describe the patient's experience and suffering in their own words. Through group discussions, the interns reflected on their own medical practices and deepened their understanding of patient suffering, which not only improved their narrative abilities but also their reflective and empathetic capacities.

Humanistic care ability is a core competency for healthcare professionals. As people's living standards continue to improve, there are increasing demands for better medical experiences, which include a greater need for humanistic care <sup>[10]</sup>. Therefore, when training interns in clinical settings, it is crucial to focus on enhancing their ability to provide humanistic care. The data results of this study show that the CAI scores of the 30 interns were higher after the internship compared to before, indicating that narrative medicine teaching can improve interns' ability to offer humanistic care. The narrative medicine teaching guided the interns to experience the perspectives of patients, doctors, colleagues, and the public, identifying the need for humanistic care from the viewpoints of patients and the public, and enhancing their ability to provide humanistic care from the perspectives of doctors and colleagues.

In this study, the application of narrative medicine in the teaching of 30 respiratory interns received positive feedback. Twenty-five interns expressed interest in narrative medicine, and 29 interns were willing to continue with the narrative medicine teaching model. This approach enhanced the interns' understanding and interest in narrative medicine, with most of the interns recognizing and being willing to continue with the teaching model.

## 5. Conclusion

In conclusion, the use of narrative medicine in the teaching of respiratory interns can improve their understanding of narrative medicine, as well as increase their JSPE-S and CAI scores, enhancing their humanistic qualities. This approach is well-received and worth promoting for broader application.

## Disclosure statement

The author declares no conflict of interest.

## References

- [1] Li L, Wang W, Jiang H, et al., 2022, The Impact of International Exchange Programs on the Medical Humanistic Spirit of Chinese Clinical Doctors. *China Continuing Medical Education*, 14(8): 90–94.
- [2] Zhan H, Hu S, 2022, Cultivating the Humanistic Literacy and Professional Spirit of Surgeons in the New Era. *Journal of Laparoscopic Surgery*, 27(10): 721–723.
- [3] Zhang Y, 2022, “Chinese Doctors”: The Construction of “Narrative Medicine” and the “Doctor-Patient Life Community”. *Western Journal*, 10(8): 159–163.
- [4] Duan M, 2023, An Analysis of Ancient Chinese Famous Doctors’ Narrative Abilities from the Perspective of Narrative Medicine. *Chinese Medical Ethics*, 36(11): 1187–1190 + 1207.
- [5] Shen M, Zhang C, Gu X, 2021, A Study on the Teaching Practice of Narrative Medicine Education to Improve Medical Students’ Empathy Abilities. *Narrative Medicine*, 4(6): 404–407.
- [6] Hua Q, Dai X, Yin X, et al., 2022, Exploring the Paths for Cultivating Medical Students’ Humanistic Care Abilities From the Perspective of Narrative Medicine. *Medicine and Philosophy*, 43(13): 68–72.
- [7] Du G, Deng Y, Liu L, et al., 2023, Research on the Application of Narrative Medicine in the Clinical Teaching of Oral Mucosal Diseases. *Chinese Journal of Medical Education Exploration*, 22(12): 1792–1796.
- [8] Fang Y, Zheng Y, Sun S, et al., 2020, Application of Task-Driven Teaching in Clinical Teaching Under the Background of Narrative Medicine. *Continuing Medical Education*, 34(6): 42–44.
- [9] Zhu J, Chen H, 2023, Research on the Application and Effect Evaluation of Narrative Medicine in Clinical Internships: A Case Study of Thoracic Surgery. *Chinese Journal of Medical Education Exploration*, 22(8): 1201–1205.
- [10] Guo L, 2022, Promoting Medical Humanities Education in Teaching Hospitals Through Narrative Medicine Practice. *Medicine and Philosophy*, 43(6): 36–39 + 51.

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