

Analysis of the Feedback on Teacher Training in an Affiliated Hospital in Shaanxi Province

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Abstract: *Objective:* This article aims to deeply analyze the feedback on teacher training in an affiliated hospital, so as to clarify the current needs and situation of teacher training and provide a scientific basis for further optimizing the teacher training system. *Methods:* The current situation and needs of teacher training in the affiliated hospital were collected by designing and distributing Tomato Form questionnaires on the DingTalk platform. The questionnaire adopted a percent-point system, all of which were indeterminate multiple-choice questions. *Results:* The average age of the clinical teachers participating in the survey was 40.44 ± 7.85 years old, with an average teaching length of 4–10 years. The results showed that 60.20% of teachers think that the amount of teacher training in an affiliated hospital is sufficient; 91.10% of teachers think that the factors affecting training conflict with working hours; 97.96% of teachers believe that the training time has an impact on the training effect; 81.63% of teachers prefer online training; 51.53% of teachers tend to arrange training time on working days; 33.16% of teachers tend to train once a month; 17.78% of teachers prefer to receive training on clinical theoretical courses and practical teaching norms and skills content. *Conclusion:* Based on the above survey results, we propose to build a comprehensive management mechanism for teacher training, including improving the access, training, and assessment mechanism for clinical teachers, and adjusting and optimizing the training program according to actual needs. At the same time, an effective communication platform should be built to promote the deep integration of teaching and practice and enhance social recognition, so as to comprehensively improve the teaching quality and medical service of the hospital.

Keywords: Teacher training; Teaching quality; Clinical practice

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1. Introduction

With the rapid advancement of medical technology, people's requirements for health services have increased year by year, and the challenge of expanding the enrollment of medical colleges has also intensified. Non-affiliated hospitals directly under colleges and universities shoulder the heavy burden of teaching, and their professional level and teaching ability directly affect the training quality of medical students^[1]. In order to ensure that medical education resources can be fully utilized, it is important to train a group of clinical front-

line doctors with solid medical theoretical knowledge and skilled practical skills to engage in teaching. Therefore, hospital teacher training has become an important means to improve the teaching level and service quality of medical clinicians ^[2]. In order to better understand the needs and current situation of teacher training in an affiliated hospital of a university, we designed a questionnaire and discussed the results.

2. Study subjects and methods

2.1. Study subjects

The survey subjects were divided into two parts, one was the interior of our hospital, and the other was the teaching base that cooperates closely with our hospital, of which the teaching base included three hospitals.

2.2. Investigation methods

2.2.1. Contents of the investigation

This survey adopted the Tomato Form on the DingTalk platform. The content of the questionnaire focuses on the multi-dimensional characteristics of the teacher group. After careful design, it covers the core information of hospital teachers' training status, training expectations, and training opinions.

2.2.2. Distribution and recovery of questionnaires

In order to ensure the breadth and effectiveness of the survey, we adopted an online delivery strategy for distribution. Each entry is set as a mandatory question. If the respondent misses an item, the system will automatically remind the respondent to complete the form; there is a limit to one questionnaire per mobile phone or computer terminal to prevent duplication ^[3]. In the end, a total of 392 questionnaires were successfully recovered, with a recovery rate of 100%.

2.2.3. Quality control

In order to ensure the accuracy and reliability of the survey data, we adopted strict quality control measures. All questionnaires were uniformly published through the Tomato Form on the DingTalk platform, and the platform was used for the collection and output of data. In addition, we also arranged for professionally trained doctors to explain the filling requirements and precautions to the respondents in detail, so as to ensure that each participant can truly fill in the questionnaire based on their actual situation.

3. Survey results and statistics

3.1. General information

According to the statistical results of the recovered questionnaire, female teachers account for the majority of teachers in the affiliated hospital (55.86%), while male teachers account for 44.13%; the average age of teachers is 40.44 ± 7.85 years old, of which the proportion of teachers under 35 years old is 25.77%, 35–45 years old is 48.72%, and over 45 years old is 25.51%; the percentages of teachers with teaching experience under 3 years are 33.93%, 4–10 years are 39.80%, 11–20 years are 17.09%, and over 20 years are 9.18%. The results are shown in **Table 1**.

Table 1. General information of clinical teachers ($n = 392$)

Item	Category	<i>n</i> (%)
Gender	Male	173 (55.86)
	Female	219 (44.13)
Age	< 35	101 (25.77)
	35–45 years old	191 (48.72)
	> 45 years old	100 (25.51)
Teaching experience	< 3 years	133 (33.93)
	4–10 years	156 (39.80)
	11–20 years	67 (17.09)
	> 20 years	36 (9.18)

3.2. Status quo of hospital teacher training

In terms of whether the training carried out in an affiliated hospital in recent years is sufficient, it is believed that the proportion of sufficient teacher training in the hospital is 60.20%, the proportion of average is 33.93%, and the proportion of highly sufficient is 22.70%; in terms of factors that affect teachers' participation in training, it often conflicts with working hours and cannot be coordinated (91.10%), the proportion of the lack of suitable training courses is 37.76%, and the proportion of poor effect due to short training time is 29.34%; in terms of factors that have an impact on the training effectiveness, the proportion of training time is 97.96%, the proportion of training content is 83.16%, and the proportion of training method is 74.49%. **Table 2** shows the status quo of hospital teacher training.

Table 2. Status quo of hospital teacher training

Item	Category	%
Amount of training provided in recent years	Sufficient	60.20
	Average	33.93
	Highly sufficient	22.70
	Insufficient	5.10
Factors that affect participation in training and working hours	Often conflicts with working hours and cannot be coordinated.	91.10
	There is no suitable training course.	37.76
	The short training time leads to poor results.	29.34
Factors that have an impact on the training effectiveness	Training time	97.96
	Training content	83.16
	Training method	74.49
	Training teachers	65.82

3.3. Expectations of hospital teacher training

In terms of teacher training methods in an affiliated hospital, the most popular method is online training (81.63%), followed by sharing and communication between colleagues (79.60%), and offline training (75.00%); for the training time, most teachers prefer Monday to Friday (51.53%), 37.25% depend on training needs, and those who

prefer Saturdays and Sundays are 8.93%; for the training frequency, the proportion of those who are willing to receive training once a month is 33.16%, and once a quarter is 30.61%, and those depending on training needs is 19.90%. In terms of training content, the most popular content is clinical theory courses and practical teaching norms and skills (17.78%), followed by teaching design methods (15.82%), and multimedia and other modern teaching methods (13.85%). The results are presented in **Table 3**.

Table 3. Hospital teacher training expectations

Item	Category	%
Training methods	Online training	81.63
	Sharing and communication between colleagues	79.60
	Offline training	75.00
Training time	Monday to Friday	51.53
	Depending on training needs	37.25
	Saturday and Sunday	8.93
Training frequency	Once a month	33.16
	Once in a quarter	30.61
	Depending on training needs	19.90
	Depending on training teachers' availability	65.82
Training content	Clinical theory courses and practical teaching norms and skills	17.78
	Teaching design method	15.82
	Tips for using multimedia and other modern teaching methods	13.85
	Basic teaching theory	11.94

4. Discussion

4.1. Teacher quality is the cornerstone of clinical talent training

In the medical field, the cultivation of clinical talents is a cornerstone that stabilizes the quality of medical services and the health of patients. As the core force behind medical services, their skills and literacy directly reflect the depth and warmth of medical care. Achieving this is inseparable from the presence of a high-quality teaching team. They not only possess profound medical skills and the ability to teach complex medical theories in a simple, easy-to-understand manner but also draw on their rich clinical experience to help students appreciate the charm and responsibility of medicine through practical application. It is with the hard work and selfless dedication of these high-quality teachers that our medical services are more humane and professional, and that patients can enjoy safer and more effective treatment. In this process, a virtuous circle is formed between the training of clinical talents and the high-quality teaching team, jointly promoting the continuous development and progress of medical undertakings ^[4].

4.2. The scientific model has become a new chapter in the training of clinical teachers

In the face of the rapid development of the medical industry, it is imperative to build a scientific clinical teacher training model. This necessitates not only enhancing the dual focus on medical theory and clinical practice but also ensuring that the knowledge and skills of the teaching staff remain up-to-date to meet the demands of cultivating well-rounded clinical talents ^[5]. In practice, we need to closely combine theory and practice, strengthen

clinical practice teaching, and improve students' practical skills. At the same time, a well-designed evaluation and incentive mechanism acts like two wings, helping the teaching team soar in the realm of educational innovation and unleash their full potential and creativity.

4.3. Education informatization sets off the era of teaching development

Under the wave of 5G, artificial intelligence, and other technologies, education informatization is changing the reform of teaching at an unprecedented speed ^[6]. With its unique advantages, such as unrestricted time and space and lower cost, online education is gradually becoming a new favorite in the teaching field ^[5]. However, due to the unique real teaching experience and profound interpersonal interaction of offline clinical teaching in the medical industry, it is still difficult to completely replace online education. With the continuous progress of technology, this gap is gradually narrowing. For an affiliated hospital, seizing the opportunity of this era and actively exploring the teaching mode of online and offline integration will be the key to its future development.

4.4. Dynamic evaluation and continuous improvement have become the eternal theme of teacher training

In order to ensure the effectiveness and pertinence of teacher training, dynamic evaluation and continuous improvement have become the core of the work of an affiliated hospital. Through questionnaires, group discussions, one-on-one interviews, and other ways, we widely collect feedback from clinical teachers to ensure that the training program can accurately meet their actual needs and requirements. At the same time, the training effect is regularly evaluated, and the training content and methods are adjusted in time to ensure the continuous improvement of the training quality. This process not only promotes the professional growth of the teaching team but also lays a solid foundation for the sustainable development of the medical industry. Either way, it is necessary to ensure that the feedback information collected is true, objective, and timely collated and analyzed in order to make targeted adjustments and improvements to the training program. At the same time, we should also respect the privacy and opinions of clinical teachers, give them full recognition, and encourage them to actively participate in feedback ^[7].

4.5. Real-time evaluation of the training effect and continuous improvement of the training program

Real-time evaluation of the training effect is essential for the continuous improvement of the training program. During the training process, we need to regularly evaluate the learning results of clinical teachers to understand their mastery of knowledge, skills, and practice. Through the evaluation results, we can find the shortcomings of the training in time and adjust the training content and methods in a targeted manner. In addition, we can further optimize the training program by collecting feedback from clinical teachers to understand their training needs and expectations. Through real-time evaluation and continuous improvement, we can gradually build a more scientific and effective clinical teacher training model for the sustainable development of the medical industry ^[8].

In short, this article reveals the high demand and wide recognition in the field of hospital teacher training. In order to accurately connect and efficiently meet this urgent need, we would like to put forward the following strategic suggestions:

- (1) Building an integrated management system: Management departments at all levels should work together to introduce a series of incentive-supporting policies and strengthen the concept of teaching priority. The clinical base should innovate the incentive mechanism and directly link the effectiveness of teaching work to the year-end performance evaluation, title promotion path, and salary, so as to stimulate the enthusiasm and creativity of teachers ^[9].

- (2) Optimizing training content and personalized customization: The training course system is enriched, especially focusing on the deep integration of clinical practical skills and efficient teaching skills. At the same time, a hierarchical classification training strategy is implemented, accurately identifying the personalized development needs of medical personnel at different levels and positions, and customizing training programs to ensure the relevance and effectiveness of the training content.
- (3) Innovative training mode through integrating online and offline advantages: The new model of “Internet + Medical Education” is actively explored, combining the dual advantages of online flexibility and convenience and offline practical experience, and using diversified teaching methods such as on-site practice and case analysis to enhance the interactivity and effectiveness of training. This is not only conducive to the scientific and institutionalized construction of clinical teacher training but also lays a solid foundation for the stable development of teachers and the continuous improvement of teaching quality ^[10].
- (4) Strengthening exchanges and cooperation and deepening the integration of industry and education: Medical institutions are encouraged to establish a normal communication platform, share successful experiences, and solve development problems together. At the same time, cooperation with institutions of higher learning, vocational colleges, and industry enterprises is deepened, building an ecosystem of deep integration of industry, university, and research, jointly promoting the seamless connection between medical education and clinical practice, and contributing to the cultivation of more high-quality and compound medical talents ^[11].

5. Summary and outlook

This survey reveals the importance and urgency of hospital teacher training. In order to cultivate more excellent clinical talents, we need to comprehensively improve the teaching level and clinical skills of the teacher team by building an integrated management system, enriching training content, and innovative training forms. At the same time, we will strengthen peer exchanges and cooperation between schools and enterprises to jointly promote the prosperity and development of medical education. In the wave of the information age, it is imperative for us to work together, using a high-quality teacher team as our cornerstone, to make greater contributions to the quality of medical services and the health of patients ^[12].

This paper has several limitations: Firstly, the survey samples are limited and the information is insufficient. Secondly, due to constraints in analytical ability, the article contains inherent defects. Lastly, the teacher training program at the affiliated hospital requires further studies to improve and develop in a healthy and sustainable manner.

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Disclosure statement

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References

- [1] Deng T, Huang L, Huang X, et al., 2023, Analysis of the Teaching Ability and Training Status of Clinical Medical Teachers in Local Colleges and Universities—Take the Medical Department of S University as an Example. *Theoretical Research and Practice of Innovation and Entrepreneurship*, 6(01): 94–98 + 122.
- [2] Xie Q, Zhu J, Yuan T, et al., 2015, Investigation and Analysis of the Intention of Standardized Training for General Practitioners in Shanghai. *Chinese General Medicine*, 18(34): 4233–4235.
- [3] Zhang M, An Y, 2015, Investigation and Analysis of the Faculty and Teaching Quality of Non-Direct Clinical Medical Schools. *Fujian Medical Journal*, 37(05): 122–123.
- [4] Li Z, Guo Y, Mei Y, et al., 2022, Analysis of Anxiety and Influencing Factors of Medical Students during the COVID-19 Epidemic. *Contemporary Nurse (Mid-Year Issue)*, 29(07): 129–132.
- [5] Li Z, Zhong Q, 2024, Research on Internet Hospital Service Operation Mode: Comparison of Independent Hospital Operation and Joint Operation of Hospital Enterprises. *Journal of Management Engineering*, OnlineFirst.
- [6] Chen P, Pan L, 2014, The Exploration of Strengthening the Construction of “Double-Teacher” Teachers in Clinical Medicine. *Journal of Traditional Chinese Medicine Management*, 22(12): 1999–2000.
- [7] Zhang S, Huang T, Feng Y, 2024, Research on the Strategy of Realizing High-Quality Medical Services in Hospitals with High-Level Internet Hospital Construction. *Chinese Hospital*, 28(07): 7–11.
- [8] Guo Y, Du L, 2024, Three-Party Evolutionary Game Analysis Considering Platform Utilization and Patient Feedback in the Context of “Internet + Medical Treatment.” *Industrial Engineering and Management*, OnlineFirst.
- [9] Cui J, 2022, Research on the Construction of Teachers in Medical Colleges and Universities in Henan Province under the Background of “Double First-Class.” *Journal of Henan University of Science and Technology*, 42(04): 38–43.
- [10] Zheng Z, 2023, Investigation and Research on the Teaching Status and Development Countermeasures of Xi’an International Chinese Education and Training Institution, dissertation, Xi’an University of Petroleum.
- [11] Lei M, Zheng L, Qin F, 2022, Investigation and Countermeasures on the Teaching Status of General Teachers in a Municipal Hospital. *Henan Medical Research*, 31(21): 3972–3976.
- [12] Fang X, Han W, Xu S, et al., 2022, Iterative Innovation Empowers the Training of High-Level Interdisciplinary Medical Talents in the New Era: Experiences from School of Medicine, Zhejiang University. *Concord Journal of Medicine*, 13(01): 9–12.

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