

Analysis and Reflection on the Present Status of Evaluation Competency for Teaching Faculty of the Standardized Residency Training in General Practice under the Background of New Medical Education

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Abstract: The evaluation competency of teaching faculty in standardized residency training for general practice is a dynamic intelligence based on educational reform, paradigm shift of evaluation, and the professional development needs of teachers in the context of new medical education. This study aims to analyze the present status of evaluation competency for these teaching faculty, including their knowledge, skills, ideas, and consciousness, as well as their internal cultivation and quality. Through a clinical teaching evaluation practice of standardized training for general practice residents, the study explores the value, expected performance, and empirical analysis of developing teacher evaluation competency. The research draws on domestic and foreign research experiences, and proposes a path for promoting the development of evaluation competency for teaching faculty in this field to improve the quality of residency training in general practice.

1. Introduction

In the context of the new medical era, medical education has undergone a fourth-generation reform that emphasizes a cross-disciplinary approach anchored in the foundational goal of promoting health [1]. This shift towards a competency-based education model, which prioritizes student-centered learning and results-oriented training over traditional knowledge-based pedagogy [2], extends beyond the confines of academic institutions and penetrates into post-graduate training, including the standardized training of residents for medical graduates. In order to cultivate the six core competencies of resident physicians, these programs adhere to the principle of “character education” and prioritize the inculcation of traditional virtues. A competency-based approach to medical education is focused on producing measurable outcomes that serve as benchmarks for assessing the effectiveness of educational programs and, more specifically, evaluating the performance of resident physicians in attaining the requisite competencies. Such an approach is predicated on a results-oriented philosophy that permeates both educational and practical domains.

Evaluation is a critical variable in promoting and improving the achievement of standardization

for general practice residency. In the context of the new medical era, investigating the pathways and methods for enhancing the evaluation competency of general practice resident and teaching faculty members is essential for enhancing the developmental trajectory of teaching faculty members' evaluation competencies, uplifting the quality of education for standardized residency training, and promoting ideal outcomes for general practice resident physicians.

2. Value Implications and Conceptual Characteristics of Promoting the Development of Evaluation Competency for Teaching Faculty of the Standardized Residency Training in General Practice

2.1. Value Implications of Promoting the Development of Evaluation Competency for Teaching Faculty of the Standardized Residency Training in General Practice

The standardized residency training in general practice carries unique social value and strategic significance. As an essential component of such training, the evaluation competency of teaching faculty has a direct impact on the training outcomes. In the context of the new medical era, it is self-evident that promoting the development of teaching faculty members' evaluation competencies holds significant value implications.

In terms of talent value, given the current competency-oriented and results-focused nature of standardized residency training, it is essential for teachers to engage in precise and effective evaluation, scientific feedback and application, and active reflection and self-improvement to promote their professional development, ensure training effectiveness, and enhance the quality of talent cultivation. In terms of practical value, fostering a culture of evaluation competency among teaching faculty members could serve as a feasible entry point for implementing layered, progressive teaching in standardized residency training. This would help to reconstruct the evaluative competency system, deepen the reform of standardized residency training, improve the quality of training, and enhance the competency of general practice resident physicians.

2.2. Conceptual Characteristics of Promoting the Development of Evaluation Competency for Teaching Faculty of the Standardized Residency Training in General Practice

In order to ensure the smooth implementation of standardized residency training for general practice, it is imperative for the teaching faculty to possess a robust set of skills in evaluating competencies, thus ensuring the orderly conduct of evaluation practices. Evaluation competency knowledge can be characterized as the cornerstone of evaluation competency, with professionals requiring considerable insight into evaluative content, methods, goals, and outcomes within the context of any evaluative scenario [3]. Evaluative praxis, on the other hand, can be understood as the concrete manifestation of evaluation competency, requiring teachers to practically apply their knowledge and skills in the evaluation of their teaching practices. Furthermore, teaching faculty members should boast the capacity to scientifically manage and utilize evaluative outcomes, ensuring that educational objectives are effectively met. Evaluation management, therefore, constitutes an internalized aspect of evaluation competency, calling upon teaching faculty members to carefully safeguard, analyze, present, and engage in self-reflection regarding evaluative outcomes. Finally, teaching faculty members must be equipped with the aptitude to dynamically adjust their metacognitive evaluation systems, thus promoting the development of individual evaluative expertise. Metacognitive evaluation can be regarded as a qualitative outcome of evaluation competency, best exemplified by the active self-reflection and evaluation that faculty engage in after evaluative activities [4]. Only through persistent diagnosis, reflection, and reconstruction of the entire evaluative process in teaching practice can individuals continuously enhance their personal evaluation competency, thereby realizing their professional development as teaching professionals.

3. An Empirical Analysis of the Lack of Evaluation Competency for Teaching Faculty of the Standardized Residency Training in General Practice

3.1. The Insufficient Innate and Nurtured Evaluation Competencies of Teaching Faculty Members

In the field of medical education after graduation, the development of the teaching role of clinical faculty members has transitioned from being primarily as a “physician” to being a “teacher”. However, this transformation from “medicine-first” to “teaching-first” has largely taken place without formalized and systematic training in educational theory, due to the unique nature of the medical profession. As a result, many clinical faculty members lack sufficient knowledge in education and teaching theory. Additionally, there is often a dearth of relevant training opportunities in educational theory for those who have become teaching faculty members for standardized residency training in general practice.

Due to the lack of foundational education evaluation knowledge among teaching faculty members prior to their teaching roles, and the lack of adequate knowledge supplementation and reconstruction during the teaching process, the level of teaching evaluation competence among clinical faculty members varies greatly. There are also imbalances in the evaluation content, and various types of assessment grading criteria are frequently diluted by personal experience, which leads to distorted evaluation results. Feedback in many cases simply includes basic assessment scores, and does not provide sufficient developmental guidance for general practice residents to improve their learning and skills. This hinders their ability to appropriately evaluate and improve their own performance.

3.2. The Rigid Implementation of Teaching Faculty Members’ Evaluation Practices with a Lack of Humanistic Approach

In actual clinical teaching activities, the practice of prioritizing the use of general practice residents while neglecting their development is all too common. As a result, subjective and arbitrary evaluations of general practice residents are often observed during clinical teaching. This includes a lack of flexibility in evaluation methods, rigid evaluative tool selection, inappropriate questioning, inappropriate evaluative language, unobjective results, and unreasonable feedback.

Currently, the evaluation of training outcomes for general practice residents often relies on evaluations at the end of the training period, which only provides them with a cold score and lacks comprehensive evaluations and learning guidance from teaching faculty members.

The inertia and rigidity of the current evaluation methods, combined with arbitrary evaluations, has disrupted the developmental and supportive value of evaluations, leading to a loss of humanistic value in the evaluation process.

3.3. Inappropriate Management and Misuse of Teaching Faculty Members’ Evaluation Leading to a Loss of Educational Value

Currently, general practice residents undergo rotations in various departments, often for short periods of time. This has led to a lack of a systematic and coherent evaluation management system, resulting in one-sided, arbitrary, and ineffective evaluations. As a result, the evaluative function has weakened significantly.

Teaching faculty members are unable to effectively manage the evaluation results, provide appropriate and scientific explanations for the evaluation results, or provide effective feedback to the general practice residents, making them aware of their shortcomings and gaps. This has led to the misuse and abuse of evaluation results, which has not only failed to play a positive role in motivating and promoting general practice residents but has also hindered the improvement of

teaching decisions and the quality of training. The mismanagement and misuse of evaluation results have become a burden for both the evaluative subject and the evaluator, leading to a loss of the meaning of evaluation and negatively affecting the implementation and perception of evaluations.

3.4. Insufficient Reflection on Evaluation by Teaching Faculty Members Leading to Dysfunctional Metacognition System

During the clinical teaching process, teaching faculty members rarely conduct systematic reflection and summary on their own teaching evaluation behavior and results. They only consider evaluation results as a simple teaching symbol and fail to establish a symbol interaction.

Currently, the reflection of teaching faculty members on their teaching evaluation mainly falls into two categories. One is that they have never thought about the composition, meaning, and educational guidance role of resident evaluation results. The other is that they partially reflect on evaluation language, evaluation paradigm, and teaching evaluation behavior during evaluation implementation. However, whether it is the lack or insufficiency of reflection, without comprehensive reflection from the theoretical support level, starting from the cognitive-emotive-behavioral-efficacy domains, to adjust the evaluation metacognition system, the internal structure of evaluation knowledge and skills will become unbalanced, and teaching evaluation competencies of teaching faculty members will not be effectively improved.

4. Exploring Pathways for the Development of Evaluation Competencies of Teaching Faculty Members in General Practice Residency Training under the New Medical Education Background

4.1. Externalization of Internal Drive for Bi-Directional Linkage

Government agencies and local functional departments should fully recognize and value the influence of evaluation competencies of teaching faculty members on training quality. The concept of developing evaluation competencies of teachers should be integrated into various teacher training, teaching seminars, research projects and other initiatives. Meanwhile, relevant medical education evaluation training programs and content should be developed to help training and specialty bases realize the importance of educational evaluation. A healthy evaluation environment should be created to assist teaching faculty members in truly playing the role of evaluation-led teaching in clinical teaching practice.

In the structure of evaluation competencies for teaching faculty members, the accumulation of evaluation knowledge ultimately depends on teachers' self-directed learning and evaluation practice. Only when teachers truly embrace the concept of "evaluation that promotes learning", recognize their identity as the subject of evaluation, and acknowledge the importance of evaluation competencies for their professional development, will they actively seek development and unleash their intrinsic motivation for learning [5]. Through internal drive, they can develop theoretical knowledge of educational evaluation, focus on learning evaluation knowledge and skills, and consciously criticize and reflect on their own teaching evaluation practice in practice. By identifying their own issues, weaknesses, and solutions, they can adjust their subsequent evaluation activities and continuously enhance their personal evaluation competencies.

4.2. Focusing on In-House Teaching and Research, Conducting Practical Evaluation Practice

The development of evaluation competencies of teaching faculty members is driven by internal and external factors, ultimately leading to in-house evaluation, with a focus on improving both the evaluation competencies of teachers and the quality of education and training, and promoting the common development of teachers and students.

At the training base level, a good evaluation atmosphere should be created, including the establishment of an evaluation system, emphasis on evaluation and promotion, job title upward mobility, and the participation of all staff. At the same time, the standardized training management committee for resident physicians should play a leading role in teaching, learning, and research activities, establish the positioning, top-level design, and system construction of in-house education evaluation, and assist teaching faculty members in conducting practical, high-quality, and precise teaching evaluation, and recognizing the importance of educational evaluation.

At the specialty base level, the teaching and assessment groups can play a significant role in teaching and research. The organization of teaching faculty members to conduct collective lesson preparation, teaching seminars, and book exchange meetings can be implemented. Through a comprehensive plan for educational evaluation practice in the early stages, teaching faculty members can establish evaluation competencies based on medical professional literacy in communication, learning, mutual learning and evaluation, reflection, and experience. It is through this process that teaching faculty members can independently shoulder the mission of medicine and education in complex and changing medical environments and form a teacher evaluation culture with unique in-house characteristics.

4.3. Constructing a Value Identity for evaluation, Fully Leveraging the Function of Evaluation Promotion

First and foremost, it is essential to extensively promote the value connotations of the evaluation results, foster a sense of value identity, and consequently attain conscious evaluation and enhance evaluation competencies. The scientific and appropriate interpretation of the evaluation results will enable students to accurately identify their proximal development zone and stimulate their learning momentum, thereby realizing the productive value of educational evaluation. The accurate and effective utilization of evaluation results, timely adjustment of teaching decisions and practices, and the implementation of tiered and progressive education are the long-term values of educational evaluation, which ultimately facilitates precise talent development.

Moreover, it is imperative to attach importance to the sustained improvement and promotion of teaching and education through the role of educational evaluation. The teaching faculty members can facilitate the improvement of students' weak areas, adjustment of learning strategies, and enhancement of learning application and transfer by providing effective evaluation feedback. This, in turn, promotes students to gain more clinical learning experiences and feedback and improves the quality and effectiveness of training. Effective evaluation feedback also serves as a crucial basis for teaching decisions and reforms in training bases, specialty bases, and clinical departments. Furthermore, it also serves as an important reference to enhance the evaluation competencies of teaching faculty members.

4.4. Prioritizing the Establishment of Meta-Evaluation Mechanisms to Enhance Evaluation Competencies

Meta-evaluation refers to the re-evaluation of the evaluation practice itself after the completion of the evaluation activity. In order to enhance the evaluation competencies of general practice residency program teaching faculty members and improve the quality of standardized residency training, it is crucial to prioritize and establish meta-evaluation mechanisms for educational evaluation, and promote the professionalization of evaluation development. On one hand, it is necessary to strengthen the identification and evaluation of the quality of evaluation itself, which refers to meta-evaluation [6]; on the other hand, it is important to strengthen the metacognitive regulation of the evaluation subject evaluation system, which refers to teaching meta-evaluation, similar to the auditing function in the field of accounting. If the development of the evaluation of the standardized residency training education and the evaluation competencies of teaching faculty

members rely solely on theory and experience, and cannot meet the scrutiny of “auditors”, the quality of training and the direction of talent development will face the serious risk of “going off the rails”.

Establishing meta-evaluation mechanisms for evaluation implies establishing a set of thoroughly scrutinized meta-evaluation standards, models, and methods. With regards to the teaching level, a teaching meta-evaluation cycle mechanism should be established, i.e., building a set of meta-evaluation cognitive, practical, and management cycle loops for teaching faculty members based on evaluation practice. The evaluation of teaching in standardized training for resident physicians, with the ultimate goal of competency development, should integrate the concepts of meta-evaluation and educational meta-evaluation to effectively enhance the evaluation competencies of teaching faculty members.

5. Conclusions

Building on existing domestic and international research outcomes and the challenges faced by medical education evaluation in China, this study proposes an initiative to develop the evaluation competencies of teaching faculty members. Through policy guidance, cognitive transformation, institutional norms, value reconstruction, and the establishment of a meta-evaluation system, the focus is on local institutions and the development of competency-based training for resident physicians in the general practice residency program. The initiative aims to address the current issues faced by the teaching faculty members, including the lack of evaluation knowledge and competencies, inadequate evaluation methods and tools, unsatisfactory evaluation practices and management, poor feedback and reflection mechanisms, and inadequate evaluation application. The aim is to continuously enhance the evaluation competencies of teaching faculty members.

In the standardized training of resident physicians in the general practice residency program, it is essential to require teaching faculty members to possess high levels of evaluation competencies. Conducting appropriate, precise and effective educational evaluations is necessary not only to ensure the quality of standardized training for resident physicians but also to meet the continuous improvement demands of the medical education system after graduation.

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