Research and Practice on the Evaluation System of Promoting Learning of Clinical Courses under the Background of Phased Examination of Medical Practitioners

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Abstract. Under the background of the phased examination of practicing physicians, the connotation construction of promoting learning evaluation system of classroom evaluation, internship evaluation and practice evaluation is established to cultivate the medical moral quality and clinical practice ability of medical students, grasp the core content of process management and process evaluation centered on medical students in promoting learning evaluation system, actively explore the practice promoting learning evaluation system, and further improve the teaching quality.

Introduction

Under the background of the phased examination of clinical practitioners and the "three oriented" talent training mode of our hospital, we strive to explore an evaluation system that is "student-centered" and focuses on improving students' learning efficiency and learning effect, and cultivate students' abilities of independent learning, communication, cooperation, team spirit, analysis and problem-solving. To further improve the quality of teaching, we should establish the connotation construction of promoting learning evaluation system of classroom evaluation, probation evaluation and practice evaluation to cultivate medical students' medical ethics and clinical practice ability.

Explore the Evaluation System of Promoting Learning to Meet the Needs of Medical Education

The national qualification examination for licensed doctors is an industry admittance examination, as well as the core content of the law of licensed doctors and the management system of doctors. In 2015, the national medical examination center took the clinical medicine specialty as the research object, and carried out the examination work of phased examination demonstration research (the first stage) for clinical practitioners in 33 medical colleges according to the regional distribution, school level, participation intention, etc. The examination of the empirical research is mainly divided into two stages: the first stage is arranged before the college students complete the course and enter the clinical practice (i.e. at the end of the fourth stage), and the clinical practice can only be carried out if they pass the examination; the second stage is still carried out according to the current time. The first stage of examination is to test whether the medical students have the basic medical theory, basic knowledge and basic clinical skills required by the clinic, whether they can understand and apply the important medical knowledge to the clinical practice under the guidance of the superior doctors, and reflect the clinical thinking and post competence. It is mainly divided into medical basic knowledge examination and clinical basic skill examination: the main
form of medical basic knowledge examination is computerized examination; the main form of skill examination is objective structured clinical examination (OSCE), including consultation, physical examination, skill operation, and evaluation of communication and humanistic care. From the perspective of the content of the phased examination reform of medical practitioners, higher requirements are put forward for the basic theoretical knowledge and clinical operation skills that clinical medical undergraduates need to master, and more attention is paid to their post competency.

Under the background of the phased examination of clinical practitioners and the "three oriented" talent training mode of our hospital, we strive to explore an evaluation system that is "student-centered" and focuses on improving students' learning efficiency and learning effect, so as to cultivate students' ability of independent learning, communication, cooperation, team spirit, analysis and problem-solving. In recent years, promoting learning evaluation has gradually developed into a specific evaluation method that is valued by education researchers and decision makers. It has not only become a means for teachers to promote students' learning in schools, but also has been incorporated into education policies in many countries and regions and become the basis of the reform of evaluation system.

Harry Black put forward "promoting evaluation" as early as 1986 [1]. Learning promotion evaluation is a part of daily practice among students, teachers and peers. It seeks, reflects and responds to information obtained from dialogue, display and observation to promote ongoing learning [2]. Learning promotion evaluation is different from formative evaluation. The traditional formative evaluation is to evaluate whether students have mastered the standard, while learning promotion evaluation focuses on the learning progress of students every day in the process of striving to achieve the goal under the guidance of teachers, and informs the users of evaluation whether and when they can master the knowledge, reasoning, performance skills and development ability contained in the standard. In addition, promoting learning evaluation emphasizes the role of students in the evaluation. Its purpose is to help students understand their own learning. Students are also the decision-makers of teaching and learning activities in the future according to the evaluation information. [3]

To Establish the Evaluation System of Promoting Learning for the Teaching of Clinical Courses [4]

We should establish a scientific evaluation system for promoting learning, and use comprehensive, comprehensive and dynamic methods to effectively assess the students' professionalism, professional ability and social adaptation. Students should not only get excellent results, but also be inspired by other aspects of potential, and get comprehensive development.

The cognitive development of medical students is characterized by the accumulation of professional knowledge based on memory, the development of professional thinking focusing on both memory and understanding, and the periodic change of the development of comprehensive application ability based on Association. According to this feature, the corresponding learning promotion evaluation system should be different in different stages of medical education. The assessment of basic courses should strengthen the students' self-study ability and comprehensive induction the training and guidance of ability, the stage of clinical courses, and the assessment methods and contents should reflect the training of divergent thinking, comprehensive application ability and problem-solving ability. Therefore, in different stages, the corresponding indicators of the curriculum assessment and evaluation system should focus on the assessment of students' ability to use knowledge flexibly, so as to avoid repeating the mistakes of "exam oriented education".

Classroom Evaluation System

The course evaluation system is composed of four parts: 1. Classroom Questioning: in the course of clinical course theory teaching, students are asked questions in class, students' class status and
preview review are recorded and scored. Asking more questions is helpful to reveal the open and exploratory questions of students' understanding, and at the same time, prolonging the waiting time of questions gives students enough time to think about the answers. 2. Discussion on difficult cases: regularly organize students to discuss difficult cases, and pay attention to the whole process of learning by examining students' learning focus, participation status, ability to obtain and use information, etc. 3. New progress report (PPT group presentation): in the form of group literature review and presentation of PPT, new progress research on disease understanding, etiology, treatment and other aspects is carried out, which promotes the cultivation of students' autonomous learning ability, team cooperation ability, problem-solving ability and language expression ability. 4. Test application of test question bank: the application of test question bank in the stage examination plays a "temporary" role in the course evaluation system. Before the examination, the relevant simulated small tests are transmitted to the students by means of information technology (QQ group, wechat group, etc.), and the students use scientific review strategies and accurate memory dynamic learning test questions to prepare for the stage examination.

**Probation Evaluation System**

In the clinical probation, the effective evaluation system of probation is constructed by writing notes, simulating consultation between students and bedside consultation, physical examination between students and bedside physical examination and operation training of basic clinical skills. Writing the probation notes is to consult the patients with the accompanying teachers, to cultivate the students’ ability of communication between doctors and patients, to integrate information, and to reflect on professional emotions. The teacher should judge the students' notes on probation. The teacher should pay attention to the quality of the comments. From the students do well, need to improve the place and specific improvement methods three aspects of comprehensive guidance. The students' simulated consultation and bedside consultation focus on the cultivation of the ability of analysis, oral expression and learning reprocessing. They can not only experience the role of doctors in the simulation, but also deepen their impression on emotional cognition and disease cognition from the perspective of patients. The physical examination between students and bedside physical examination is to cultivate students' ability of information extraction, language expression and psychological tolerance. Clinical basic skill operation is to examine the practical operation ability of students. After consultation, physical examination and skill operation, mutual evaluation and self-evaluation should be carried out among students. Students' self-assessment plays an important role in autonomous learning, which is conducive to improving students' cognitive level and becoming independent learners. Students' mutual assessment is an important supplement to self-assessment.

**Practice Evaluation System**

The internship evaluation system consists of clinical skills direct observation evaluation (DOPS), Mini-CEX, graduation assessment and graduation assessment. DOPS and Mini-CEX have focused on the cultivation of communication ability between doctors and patients, problem analysis ability and practical operation ability through the collection of medical history, system evaluation, implementation of operation and health education. The graduation examination and graduation examination are carried out in the way of objective structured clinical examination, namely OSCE examination, and are in line with the examination outline of clinical doctors, including the examination of theory and skills. Through the examination, the effect of students' practice can be tested, and the students' basic clinical operation skills, analysis of problems, problem-solving and clinical comprehensive thinking ability can be cultivated. At the same time, the students' communication, exchange and humanities can be improved Huai evaluated and further improved the post competency of students through assessment.
Implementing the Evaluation System of Promoting Learning and Further Improving the Teaching Quality

Since 2014, we have actively studied and implemented an effective learning promotion evaluation system, which has laid a solid foundation for the improvement of clinical teaching quality. Based on the results of the students who participated in the empirical study of the national phased examination of medical practitioners in 2017 and 2018, this paper analyzes and discusses: in 2017 (2013 level students), 1129 students took the actual examination, with the highest score of 95.6 points, the lowest score of 42.5 points, the average score of 80.2 points, and the passing rate of 1105 students, 97.87%. In 2018 (2014 level students), 896 students took the exam, with the highest score of 95.05 and the lowest score of 43, with an average score of 81.38. 884 students passed the exam, with a passing rate of 98.66%.

Table 1. Comparative Analysis of Passing Rate in 2017 and 2018.

<table>
<thead>
<tr>
<th>Year</th>
<th>★ Number of participant</th>
<th>★ Passing Number</th>
<th>★ Passing rate</th>
<th>▲ Number of participants</th>
<th>▲ Passing Number</th>
<th>▲ Passing rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1148</td>
<td>544</td>
<td>47.39%</td>
<td>1129</td>
<td>1105</td>
<td>97.87%</td>
</tr>
<tr>
<td>2018</td>
<td>894</td>
<td>632</td>
<td>70.70%</td>
<td>896</td>
<td>884</td>
<td>98.66%</td>
</tr>
</tbody>
</table>

Note: ★: the Theoretical examination, ▲: the Skill test

Chi-Square $X^2=102.0012$, $P<0.0001$, From the statistics, we can see that the pass rate of our school in 2018 is significantly higher than that in 2017, which is statistically significant.

It can be seen from the statistical results of the above data that, through the implementation of an effective learning promotion evaluation system, the passing rate of the phased examination of practicing physicians in 2018 has significantly improved compared with that in 2017.

To sum up, the evaluation system of promoting learning runs through the learning task to form the monitoring and feedback of the whole learning process. Compared with the traditional curriculum "one test determines success or failure", the evaluation system of promoting learning emphasizes the process assessment centered on students. In the process of teaching, teachers need to spend a lot of energy to research and design how to ask questions, discuss and interact in class, organize discussion on difficult cases and report on new progress. The high participation of teachers and students improves their cognition and experience of evaluation, which can not only test the learning effect of students, but also promote their curriculum learning. Teachers can timely grasp the feedback information of teaching process, improve teaching management and adjust teaching strategies around teaching objectives, which is conducive to improving students’ metacognitive ability and learning ability. Practice has proved that the evaluation system of promoting learning has played a guiding role in the teaching practice of clinical courses in our hospital. [5]

Promoting learning evaluation is not only the end of a teaching process and teaching management process, but also the beginning of the next same process. It has a certain role of diagnosis and appraisal. The information obtained through comprehensive and scientific analysis of evaluation results is not only conducive to improving teaching methods and means, guiding students to learn correctly and effectively, but also to improving teaching quality, improving examination design and improving the quality of examination proposition. It's all good.

It needs the joint efforts and support of teachers, students and relevant education managers to further promote the study evaluation system. First of all, teachers make clear learning plans, tasks and requirements for each link of curriculum learning objectives, which helps students to gradually complete learning tasks and achieve learning objectives. Secondly, we should understand the learning characteristics of students, carry out action research, and effectively use a series of learning promotion methods, such as: increasing open and exploratory questions in class, while giving students enough time to think; judging teachers should improve the quality of comments from three aspects: Students' writing highlights, areas to be improved and improvement methods;
increasing learning at the end of simulation operation. Students’ mutual evaluation and self-evaluation can effectively play the role of promoting learning evaluation system to promote students’ learning. Thirdly, the use of standardized and constructive assessment feedback can help students to correct learning problems and clarify the direction of their next efforts, so as to boost learning motivation. In addition, the college should create a good teaching environment for teachers and students, optimize teaching strategies and methods, guide and stimulate students’ learning initiative, encourage students to actively participate in evaluation activities and experience the joy of success.

To improve the quality of medical education is a complex systematic project, which involves the construction of the connotation of education and teaching concept, the reform of teaching content and curriculum system, the innovation of teaching methods, evaluation and assessment methods, medical moral quality and clinical practice ability of medical students, especially the cultivation of post competence, which focuses on the cultivation of knowledge, quality and ability, and the strengthening of process management and process evaluation is the core content. The introduction of the evaluation system for promoting learning plays an important role in promoting the training of qualified medical students, and is more conducive to improving the students’ ability of theoretical learning integration and practical operation under the background of the phased examination of medical practitioners.

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References


