

Training and application of SSP in Clinical Medicine Students

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Abstract. [**Objective**] Training freshman as SSP (student Standardized patient) to improve the medical skill and job competency of medical students in diagnostic learning. [**Methods**] selecting the junior (freshmen and sophomores) medical students as SSP, which are recruited by student associations, trained and assessed by teachers in diagnostics departments, used for the role of senior students (juniors) in physical examination and inquiry.[**Results**] After participating in the teaching of physical examination and inquiry, SSP has mastered the two skills of inquiry and physical examination. [**Conclusion**] Training and application of SSP in Clinical Medicine Students achieved double win in diagnostics teaching.

Introduction of SP and SSP

Standardized patients, referred to as SP (Standardized Patients, Simulate Patients), according to the clinical characteristics of the disease, will be normal or patients for standardized and systematic training of clinical diseases, so as to maximize the role of clinical patients with various symptoms and some signs, mainly used for clinical medical students' consultation, physical examination training and Common clinical non-invasive treatment, to the greatest extent, to solve the problem of medical students diagnostic skills learning and clinical stage job competency improvement, student Standardized patient (SSP), that is, to train students as standardized patients.

SSP training and application in our university

At present, the relationship between doctors and patients is tense, the consciousness of patients' self-protection is strengthened, and the problem of medical students' contact with patients' probation and practice in clinical stage has always been a thorny problem in ordinary medical colleges and universities. Especially in the diagnostics learning stage, medical students have just contacted the basic stage of consultation and physical examination, and they should overcome the first time facing patients. In this stage, medical students themselves need to overcome psychological, social, physiological and other difficulties. In addition, they need to skillfully apply the contents, sequence and methods of inquiry and physical examination, so they need to practice more. Then the object of practice will become the core problem, and SP will emerge as the times require. After regular training of normal persons with certain performing qualities or dedicated patients, they can play the role of patients, as evaluators and teaching instructors. They can be used in probation teaching of diagnostics. Disease teaching in clinical practice stages of clinical departments can improve the proficiency level of clinical skills of medical students.

Recruitment and training of SSP in our university

Recruitment

It is expensive and time-consuming to recruit and train SP from the society. In order to realize the educational concept of "early clinical, multi-clinical, repeated clinical" put forward by the Committee of Experts on Higher Medical Education, and to cultivate the competence of medical students at the present stage, including the most important clinical thinking ability and doctor-patient communication, it is necessary to strengthen the training of SP. Combining with the actual situation of undergraduate medical colleges and universities, the cultivation of clinical



practical operation ability can not only reduce the cost of using SP, but also make better use of SP to serve the probationary teaching. Since 2009, the diagnostics Department of our university has tried to train students' standardized patients (SSP), or Simple standardized patients (Simple Standardized P). SSP, we select the junior (freshmen and sophomores) medical students as SSP, which are recruited by student associations, trained and assessed by teachers in diagnostics teaching and research departments, used for the role of senior students (juniors) in diagnostic diagnosis and physical examination, and issued employment letters to SSP after training and use. This batch of SSP can also be used for clinical probation and practical skills assessment in teaching bases. Our school has applied for special funds for this project. Therefore, students have corresponding remuneration in the course of using the SSP after training.

Training process

Teachers of diagnostics department use the weekend time to train the recruited SSP. Since 2009, our teaching and research department will have the training of this project every year. The training time is usually the morning of each weekend in the first semester of the school year. It needs 8 classes. Each time there are 4 classes, a total of 32 classes. The training content includes SSP introduction, consultation and so on. The clinical manifestations and characteristics of common diseases in bed systems, the precautions of SSP in disease play, the students should play the role of patients and doctors in each class, the typical case script exercise, the teacher to give guidance.

In the first lesson, the responsibilities and functions of SSP were first clarified. It was emphasized that medical students should establish a strict concept of time and a rigorous medical attitude. Combining with their previous experience of seeking medical treatment after illness, students should be educated to think positively, empathy should be fostered, and humanism should be established in combination with the motto of "benevolence and subtlety" of our school. Concern and medical professional ethics concepts, medical students in the future medical career, including internship, internship, medical entrance examination, medical practitioner examination, resident standardized training, and even to become a professional or disciplinary professionals, emphasize the role of SSP training for personal growth of medical professionals.

Next, SSP training covers consultation, physical examination and typical diseases of various systems, which are "early clinical" for freshman medical students, because according to the training program, these contents generally need to be studied in the third and fourth years of college, they are equivalent to early entry into clinical knowledge and skills. During the training period, the students were synchronized with the basic medical courses Anatomy and Physiology. SSP was highly motivated to learn. In the theoretical class, they carefully studied the methods of inquiry and the pathogenesis and clinical manifestations of various clinical diseases. As a doctor and patient, according to the teacher's guidance soon into the role, basically can be between the doctor and the patient quickly transposition play, because of the rich content of the classroom, the drill is lively and interesting, students are more enthusiastic.

After 8 weeks of training, teachers in teaching and research departments organized assessment, two teachers as the same group of two SSP examiners, two SSP selected their own skilled cases as doctors and patients, to express the ability to play the role of "patients" skilled and realistic, the "doctor" inquiry errors in place to assess the higher score, the final root. According to attendance, the average score of the two teachers as a reference, with high scores to low scores in turn to employ 80-100 SSP, and inform you can participate in the teaching of junior diagnostics.

Application of SSP in clinical medicine teaching

Physical examination application

The SSP employed mainly participates in the teaching of diagnostics for medical students in the sixth semester of their junior year, mainly including physical examination and probation teaching. There is an important link between teachers' teaching and students' practice of physical examination techniques in physical examination internship, which requires a large number of SSP. SSP at this stage are studying the first semester of their freshman year. As there are sometimes conflicts between classes, SSP participating in junior diagnostic internship should avoid conflicts with their



classes. Choosing time to participate in teaching is also a problem in the use of SSP. Fortunately, there are more SSP in our training, and medical students of different majors and classes. There are always SSP without classes or can be transferred within a certain period of time. Every probation class guarantees a certain number of SSP to participate in diagnostic teaching, and SSP are registered in the teaching and research room before class. In time and class hours, the teacher instructs how to cooperate with the teacher's teaching and the senior students' learning in this class again. SSP acts as the role of the patient when the teacher teaches. The teacher explains the key points of manipulation and carries on the operation. The junior medical students watch it. After the instruction, SSP acts as the practice method for the junior students, if there is any manipulation. Error, SSP can be put forward to them, at this time give full play to the role of SSP as a player and mentor, and their physical examination operation level has been greatly improved.

Application of inquiry

Before class, the teacher will collect all the SSP in advance and give guidance again according to the proficiency of the script, whether the playing signs are in place and whether they have certain adaptability. In class, the teacher will first standardize the status of the patient as a teacher and let all the students and SSP participate in the consultation, make a demonstration, and then the teacher will give a big one. Three medical students, about 5 or 6 students in a group, distributed in a simulated clinic, jointly questioned a SSP. During the process of questioning, SSP should act as a patient, performing physical signs. Medical students who were questioned were asked to explain the steps and matters needing attention according to the theoretical lessons. When necessary, they were given a physical examination of key parts, and teachers observed the situation of the questioning. But do not express opinions, the end of the inquiry, first of all, SSP evaluation of this group of students, proposed missing items, or the emergence of suggestive questions and other wrong inquiry methods, and finally the instructor added, if the teacher observed during the inquiry SSP performance is not in place, the script is unfamiliar, or students deviate from the inquiry. If the SSP can't deal with the sudden situation such as the theme, the teacher should communicate with the SSP separately after the group's consultation. The next time he plays the role, he will be more competent. In this process, junior medical students have a good practice on the process of inquiry and matters needing attention. After many times of practice, they initially have the ability of doctor-patient communication. SSP is more familiar with the inquiry content, and has the ability of transposition thinking and skilled skill assessment and adaptability.

After participating in the teaching of physical examination and consultation, SSP has mastered the two skills of consultation and physical examination. The teaching and research departments report to the Medical College of Clinical Sciences and issue the employment letters of "student standardized patient (SSP)" for these qualified SSP. They can also continue to serve the SSP training in the next grade and the third stage diagnostic school. Internships, in their senior, senior five to the various teaching bases during the internship, they can rely on their own SSP engagement to participate in OSCE, practitioner phased examination and graduate clinical skills assessment to continue to serve as SP, better clinical skills at all stages of assessment. With regard to the application of SP in skill assessment, its main function is to possess the necessary medical knowledge and concepts as well as the ability to provide patient-centered medical services, aiming at screening medical practitioners who can provide safe and effective patient services [1]. After our training, SSP who have been employed for two years can be competent. Work is well received by all teaching bases.

SSP training and application to achieve double win in diagnostics teaching

SSP training has realized the comprehensive improvement of clinical skills and comprehensive quality of medical students and SSP students in clinical stage. Some colleges and universities have shown that the application of SP in diagnostics teaching can obviously alleviate the contradiction of insufficient teaching resources and improve the teaching quality of diagnostics. Compared with the control group using traditional teaching methods, the students in the experimental group have the abilities of doctor-patient communication, medical history collection and comprehensive skills. The



scores of ability and professionalism were significantly better than those of the control group. The training and use of SSP in teaching have also achieved a win-win effect. Besides the same effect as this study, SSP itself has gained more benefits. In the undergraduate stage of clinical medicine, it comprehensively improves the basic knowledge, basic skills and preliminary clinical thinking of medical students, improves their own post competence as doctors, and helps to cultivate them. The habit of autonomous learning and lifelong learning.

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