A Study on the Cultivation of Professional Values among Rural-Orientated Targeted Medical Students in Shaanxi Province

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Abstract: Objective: Through investigation, we can grasp the current situation of the professional identity of rural-orientated targeted medical students in Shaanxi Province, so as to cultivate these medical students to establish correct professional values, thus improving the performance rate. Methods: Questionnaires were distributed, and interviews were carried out in three colleges and universities in Shaanxi Province. Results: Targeted medical students lack professional understanding, and their professional identity needs to be improved through medical education. Conclusion: It is suggested that colleges and universities should take measures such as setting up courses and lectures, strengthening communication between teachers and students, carrying out ritual education and social practice, as well as selecting teaching teachers to strengthen the professional values of targeted medical students.

Keywords: Targeted medical students; Professional values; Training mode

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1. Introduction
The training project of rural-orientated targeted medical students (hereinafter, referred to as targeted medical students) is organized and implemented by the National Development and Reform Commission, the Ministry of Education, the National Health and Family Planning Commission, and other departments. It is a major measure to provide talent support for deepening the reform of the medical and health system, and it is of great significance for the promotion of a healthy China. The implementation effect of the policy is affected by the compliance rate of targeted medical students after graduation. Colleges and universities undertake the important task of cultivating targeted medical students. This study investigates the current situation of the professional identity of targeted medical students in three colleges and universities in Shaanxi Province as well as explores the cultivation of professional values among targeted medical students, in order to help them establish correct professional values, improve the performance rate, as well as promote and develop grass-roots medical and health undertakings in Shaanxi Province.

2. Subjects and methods
2.1. Subjects
A total of 921 rural order-targeted free medical students from three colleges and universities in Shaanxi Province participated in the questionnaire survey, out of which 899 students responded effectively, with an
Effective rate of 97.61%. Among them, 495 (55.06%) of them were from Xi’an Medical University, 201 (22.36%) from Yan’an University, and 203 (22.58%) from Shaanxi University of Chinese Medicine; 298 (33.15%) were male students, while 601 (66.85%) were female; there were 123 students in 2017 (13.68%), 189 students in 2018 (21.02%), 141 students in 2019 (15.68%), 194 students in 2020 (21.58%) and 252 students in 2021 (28.03%). Eighty-nine students were interviewed. Among them, 40 (44.94%) were interviewed in the school, 14 (15.73%) were interviewed in the internship hospital, 19 (21.34%) were interviewed online, and 16 (17.99%) were interviewed via telephone.

2.2. Methods

Questionnaires and interviews were carried out to gauge the current situation of the professional identity of targeted medical students. With reference to the occupational identity scale put forward by Lili Zhang [1], a questionnaire on the professional identity of rural order targeted free medical students in Shaanxi Province was designed. Through in-depth interviews with the students in their dormitories, internship hospitals, and through telephone networks, the real ideas of targeted medical students were obtained, and their data and information were collected.

3. Results

3.1. Questionnaire results

In response to the question “What are the main reasons for choosing the specialty of targeted medicine?”, the survey revealed that 50.71% of targeted medical students chose the specialty in consideration of the guarantee of employment, 27.89% chose this major in order to reduce the economic burden on their families, 11.05% chose this major without understanding, and only 10.34% chose this major because of their ambition.

In response to the question “What was your understanding of the profession of grass-roots doctors at the time of enrollment?”, the survey revealed that 12.68% of targeted medical students did not know about the profession of grass-roots doctors at all, 21.20% did not know about the profession of grass-roots doctors, 39.66% had a general understanding of the profession of grass-roots doctors, 25.05% knew about the profession of grass-roots doctors, and only 1.42% had a good understanding of the profession of grass-roots doctors.

In response to the question “Do you agree that grassroots doctors have high work pressure and high risk?”, the survey revealed that more than 30% of targeted medical students believe that grass-roots doctors have high work pressure and high risk. Among them, 7.91% strongly agree, and 31.03% somewhat agree. On the other hand, 37.32% was neutral about it, 21.10% somewhat disagree, and 2.64% strongly disagree. In response to the question “Do you agree that being a grassroots doctor can realize the value of life?”, the survey revealed that 3.98% of targeted medical students strongly agree, 33.98% somewhat agree, 41.68% was neutral about it, 12.58% somewhat disagree, and 6.49% strongly disagree.

In response to the question “Does being a grassroots doctor enable me to live my ideal life?”, the survey revealed that more than 30% of targeted medical students believe that medical education can make them more determined to become grassroots doctors, of which 5.68% strongly agree and 33.06% somewhat agree. On the other hand, 42.70% remained neutral about it, 12.88% somewhat disagree, and 5.68% strongly disagree.

In response to the question “Does medical education make me more determined to become a grassroots doctor?”, the survey revealed that more than 30% of targeted medical students believe that medical education can make them more determined to become grassroots doctors, of which 5.68% strongly agree and 33.06% somewhat agree. On the other hand, 42.70% remained neutral about it, 12.88% somewhat disagree, and 5.68% strongly disagree.
3.2. Interview results
In response to the given topic on the students’ understanding of the training policy of targeted medical students, 45 targeted medical students were asked to discuss on the aforementioned issue. Among them, 29 students (64.45%) were unclear about the training policy of targeted medical students, 11 students (24.44%) accurately expressed the content of the training policy; the other 5 students (11.11%) had clear understanding about the training policy. From the interview, it can be seen that senior targeted medical students have clearer and more accurate understanding of the policy.

In response to the question “Do you feel a sense of achievement in becoming a grassroots doctor?”, 53 targeted medical students were interviewed. Among them, 11 students (20.75%) believe that a grassroots doctor is a noble profession, enabling one to serve grassroots people, and thus having a sense of achievement; 26 students (49.06%) feel that under high employment pressure, the work of a grassroots doctor is stable, but the sense of achievement is not as high as that of a specialist; the remaining 16 students (30.19%) feel that the salary of grassroots doctors is not as high, the space for development is limited, and the sense of achievement is not high. From the interview, it can be seen that those of a higher grade have a lower sense of professional identity.

In response to the question “Do you regret choosing the free training plan for targeted medical students?”, 51 targeted medical students were interviewed. Among them, 23 students (45.09%) mentioned that they did not regret it, 18 students (35.29%) were neutral about it, 10 students (19.61%) had regrets due to the restriction of the free training plan for targeted medical students to become full-time master’s students and the inconsistency between the place of service after graduation with their place of origin. The survey revealed that the number of senior targeted medical students regretting their choice is more than that of junior targeted medical students.

4. Discussion
4.1. Targeted medical students lack understanding of their major
The survey revealed that targeted medical students lack understanding of their major. The main reason for this phenomenon is that students are usually busy studying before applying for voluntary examinations, they do not have enough time and opportunity to understand the training policy of targeted medical students, and they are unclear about the rights and obligations of choosing order-oriented training. Most students choose their majors based on reality, mainly considering the current social employment situation and the economic situation of their families. Compared with targeted medical students of a lower grade, the those of a higher grade have better awareness of the training policies and compliance regulations of targeted medical students in view of their longer studying period.

4.2. Poor professional identity of targeted medical students
It can be seen from the survey that a considerable number of targeted medical students have poor professional identity and are full of worries about the general practitioner they will be in the future. There are three main reasons for this: (1) China has long paid attention to the development of specialized medicine, and the vast majority of highly educated medical students have become specialized doctors; it is generally believed that the comprehensive quality and professional level of general practitioners cannot be compared with those of specialists; (2) in addition to time constraints, doctor-patient relationship has become a problem that doctors have to face; some targeted medical students are unable to understand the causes of the social phenomenon of doctor-patient contradiction, thus gradually having cognitive deviations from their major, future medical environment, professional value, and other aspects; (3) the contradiction between ideal and reality has shaken the determination of medical students; targeted medical students have the ideal of making contributions to primary medical care, but learning medicine is a long and difficult
process; therefore, it is difficult for students to gain a sense of achievement in a short period of time, thus leaving their faith shaken; (4) the inconsistency between the place of service and their place of origin makes it inconvenient for them to take care of their families; (5) targeted medical students cannot become full-time master’s students; otherwise, they will face a breach of contract. All the aforementioned factors affect the professional identity of targeted medical students.

4.3. Medical education can improve professional identity
This study showed that 38.74% of targeted medical students agree that medical education can strengthen their determination to become grassroots doctors. Research has shown that medical education is an important way to strengthen the professional identity of targeted medical students, and it acts as a bridge between the identity of targeted medical students and the career of general practitioners [2]. In medical education, rich knowledge, practical skills, efficient teaching, and good learning environment are all conducive to the integration of clinical practice teaching and professional spirit education, which can improve the professional identity of targeted medical students.

5. Suggestions
5.1. Set up courses and lectures and strengthen ideological education
In order to cultivate the professional values of targeted medical students, it is necessary to first improve their professional identity [3]. Targeted medical students do not fully understand the current national policy preference in the field of primary health care, which does not only affect the formation and development of their professional identity [4], but also their willingness to perform [5]. Therefore, it is necessary to strengthen the publicity of the policy. Before applying for college, it is suggested that medical colleges and universities undertaking the training of targeted medical students should visit county high schools for detailed policy introduction to improve students’ awareness of the policy. Upon entering university, colleges and universities should set up relevant courses and lectures to strengthen their students’ professional identity. On one hand, it is necessary to conduct career planning and employment guidance courses for targeted medical students, help targeted medical students to understand the State’s attention to targeted medical students and the society’s needs for grassroots doctors, as well as further cultivate their sense of mission and responsibility to take root at the grassroots level, serve the people, and serve the motherland. On the other hand, excellent grassroots doctors or graduates should be regularly invited to give lectures at schools. Through their own experiences, they can help targeted medical students to realize their ideals and aspirations under the strategy of healthy China, promote their enthusiasm, encourage them to study hard, focus more on practice, and be good “gatekeepers” of people’s health.

5.2. Strengthen the communication between teachers and students as well as pay attention to the ideological and political education of the course
Hong Ge wrote in Baopuzi Neipian, “We need good teachers; if the teacher is not enough, there is no way to become successful.” It can be seen that teachers have a huge influence on students. In the current education, teachers tend to focus on imparting knowledge and skill training; there is also a lack of professional emotional guidance and professional ideological stability education for students. In view of this situation, counselors can play a part in carrying out professional values education for targeted medical students through class meetings and encourage students to express their true views on grassroots doctors, so as to determine the problems existing in their professional values and correct them in time. At the same time, counselors should convey the society’s positive appraisal on grassroots doctors to targeted medical students, help students overcome their difficulties and resistance, as well as help them to realize the professional value of grassroots doctors. On the other hand, for targeted medical students, ideological and
political education and professional education are inseparable. Professional course teachers should integrate ideological and political concepts into professional course teaching, guide targeted medical students to realize their own value and that the development of health care at grassroots level needs their strength, as well as guide the students to form professional commitment as grassroots doctors. [6]

5.3. Cultivate professional emotion through ritual education
Ritual education is very important for targeted medical students to improve their professional identity and establish correct professional values. Medical colleges and universities should carry out the following ritual education: (1) an oath ceremony for medical students should be held, as it helps to clarify their responsibilities, remind them of the oath of healthcare providers, and combine their personal professional ideal with the strategy of healthy China, so as to realize their life value; (2) a memorial ceremony for teachers should be held, so as to encourage targeted medical students to be grateful and inherit the spirit of dedication; this ceremony will also make them realize that they should not only focus on understanding diseases and the human body, but also shoulder the perfect medical mission of relieving pain and promoting health; (3) a white coat award ceremony should be held to cultivate the humanistic quality of targeted medical students; the white coat is a symbol of saving lives and healing the wounded; thus, through award ceremony, it is then possible to strengthen the sense of responsibility among targeted medical students and remind them of the mission of relieving the suffering of grassroots people.

5.4. Give full play to professional advantages and emphasize on social practice
The purpose college students’ social practice is to carry out ideological and political education with activities as the carrier. For targeted medical students, delving deep into grassroots level, serving grassroots people, receiving education, and learning skills for practical purposes can promote the cultivation of a sense of responsibility and mission as well as the establishment of correct professional values. Colleges and universities should actively organize and carry out volunteering activities and other social activities. It is necessary to encourage and support targeted medical students to venture into the countryside, take advantage of professional advantages, provide simple medical check-ups for grassroots people, such as measuring their blood pressure and blood glucose levels, as well as popularize medical knowledge. [7] In practice, it is imperative to improve the professional skills of targeted medical students, cultivate humanistic feelings, apply humanistic feelings to promote telepathy and resonance between doctors and patients in medical practice [8], as well as touch the hearts of targeted medical students, so as to promote the development of correct professional values and strengthen their confidence in serving people at grassroots level.

5.5. Select teaching teachers and pay attention to teaching by example and verbal instruction
The clinical practice period is not only the key period for medical students to shape professional values, but also an important stage for their professional socialization. In the process of practice, the words and deeds of teaching teachers will have an impact on targeted medical students. Therefore, practice hospitals should select teaching teachers with exquisite professional skills and noble moral quality. First, teaching teachers should imperceptibly set an example of boundless love and benevolence for the students as well as guide the targeted medical students to learn and love their work through words and deeds. Second, they should integrate the knowledge of general medicine and community medicine into the training according to the competency requirements of general practitioners and strengthen the understanding of targeted medical students on the service concept and professional requirements of general medicine, so as to cultivate the professional skills and humanistic quality of targeted medical students. Third, they should emphasize on the training of doctor-patient communication skills through role-playing, case teaching, and
other methods\cite{12}, so that students can clearly appreciate the doctor-patient relationship. This will eliminate the psychological and spiritual pressures of targeted medical students, reduce the impact of doctor-patient relationship on future employment, and help targeted medical students strengthen their confidence in serving at the grassroots level.

6. Conclusion
In conclusion, colleges and universities should help targeted medical students establish correct professional values through various ways and encourage targeted medical students to realize their life values in serving at the grassroots level. In this way, there will be more general practitioners who can serve at the grassroots level and contribute to the construction of a healthy Shaanxi as well as the strategy of healthy China.

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Disclosure statement
The authors declare no conflict of interest.

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