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A Teaching Model with Physical Education Characteristics of "Giving Priority to Physical Education and Combining Physical Education with Medical Treatment"

Qiuyang Sun*

Zhengzhou Shengda College of Economics, Business and Management, 451191, China *Corresponding Author.

Abstract:

As a teaching model with physical education characteristics which focuses on physical education (P.E.) and combines P.E. with medical treatment to cultivate application-oriented inter-disciplinary talents is the combination and infiltration of two professional fields from theory to technology. The teaching of "giving priority to P.E. and combining P.E. with medical treatment" mainly relies on the advantages of the sports and health care major in the P.E. Department of colleges and universities and universities, takes the school's school-running ideology of "giving priority to P.E. and combining P.E. with medical treatment" to cultivate practical sports talents as the guidelines, and implements the characteristic education mode of the combination of P.E. and medical treatment for the students of the sports and health care major in the P.E. Department, which not only can cultivate the students' ability for formulating exercise prescriptions, but also opens up a new path suitable for the cultivation characteristics of the compound talents in the colleges and universities and universities in China, and provides human resources protection for the maintenance of public health, prevention of sub-health, reduction of diseases, and solving the problem of difficult and expensive medical treatment.

Keywords: P.E. Department; combination of P.E. and medical treatment, Teaching mode, Cultivation, Study.

I. INTRODUCTION

Physical education (P.E.), as an important course in higher education, has been more and more integrated and combined. The curriculum of students in the department of physical education in colleges and universities and universities should take the complementary path of "focusing on P.E., combining P.E. with medical education, and infiltrating P.E. with medical education" in combination

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with the training objectives, and offer some courses that are closely related to the future and have strong practicability, such as sports medical treatment, medical sports and various methods of body-building exercises, etc., so that students can master certain practical skills of combining P.E. with medical education and have considerable theoretical knowledge of combining P.E. with medical education, which are of great practical significance to improve the educational quality of cultivating compound talents with the combination of P.E. and medical treatment, cultivate some practical compound talents who can formulate exercise prescriptions, effectively improve the national physical quality, reduce diseases, meet the public health needs, and prevent and treat various diseases.

Li Guoping, a member of the National Committee of the Chinese People's Political Consultative Conference and president of the Sports Hospital of the State Sports General Administration, explained that medical treatment should be turned to prevention by sports with "the combination of P.E. and medical treatment", which provided an exploration model for the combination of P.E. and medical treatment. Member Qian Limin also proposed to promote the integration of P.E. and medical treatment, so that exercise prescription can really play its role in disease prevention, treatment and rehabilitation. Therefore, it is urgent to reform the education of sports health care major in the P.E. Department in colleges and universities and universities in terms of ideas, development ideas and so on, and cultivate practical compound talents who have both "physical" and "prevention" knowledge as soon as possible, which is not only to meet the public health needs and gradually solve the special problems of difficult and expensive medical treatment for the masses, but also the inevitable trend of the development of P.E. Departments in colleges and universities under the background of medical reform^[1-3].

II. NECESSITY OF SETTING UP THE P.E. CLASS OF "COMBINING P.E. WITH MEDICAL TREATMENT"

Since the reform and opening up, the P.E. Departments of colleges and universities and universities, like other colleges and universities, have experienced the process from general P.E. teaching, special P.E. teaching to medical P.E. teaching, and have achieved certain results, such as the continuous improvement of teaching forms, closer teaching contents to students' life reality, and the change of the original situation of attaching importance to technology over theory, complicated examination scores and so on. However, there are still many problems to be solved. For example, the physical education courses in most colleges and universities are similar to those of ordinary colleges and universities^[4] without a reasonable sequence and complete system up to now, failing to involve the combination of physical education and medical treatment. Although it is involved in a few schools, but only limited to the requirements of sports and medical theories. The lack of teachers' quality of "combination of physical education and medical treatment" has directly led to the dissatisfaction of

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students' comprehensive quality in sports knowledge, ability and personality characteristics, which cannot meet the needs of society for the cultivation of "combination of physical education and medical treatment" compound talents.

With the rapid development of modern medical science and technology, new breakthroughs have been made in clinical diagnosis and treatment of many diseases. However, no matter how advanced medical science is, there are incurable diseases and unstoppable deaths, which is the spirit of science. Therefore, the basic policy of medical and health care in China is to put prevention first and combine prevention and treatment, which is "combination of physical education and medical treatment" and combination of prevention and treatment, so as to achieve the goal of safeguarding the health of individuals and groups of people. Therefore, whether it is the highly-regarded medical reform or the strategy of "National Fitness Program" and "Olympic Glory Program" being deeply implemented by our country, it is urgent to use the viewpoint and method of combination of physical and medical knowledge to guide and monitor the health problems of different groups of people and the sports they take part in, and to solve practical problems such as health education, sports care, injury prevention, rehabilitation care and so on. It is expected that the P.E. departments of colleges and universities will further cultivate practical compound talents who have both "physical" and "prevention" knowledge on the basis of training a large number of sports talents. However, the cultivation of this kind of talents can only be realized through the professional education of sports health care in colleges and universities and universities, which urgently requires the P.E. departments of colleges and universities and universities to serve the national strategy and make reform measures in terms of ideas, development ideas and institutional mechanisms to meet the needs of rapid social development.

- 2.1 A Teaching Model with P.E. Characteristics of "Giving Priority to P.E. and Combining P.E. with Medical Treatment"
- (1) Teaching goal. Facing the society, serving sports and medicine is the main feature of the teaching goal of "giving priority of P.E. and combining P.E. with medical treatment", which is the key to distinguish the P.E. departments of colleges and universities from other colleges. The goal of teaching model with P.E. characteristics of "giving priority to P.E. and combining P.E. with medical treatment" is to enable students to master sports medicine, rehabilitation medicine scientific theory, operation skills and scientific methods of body training through various teaching activities of experiments while learning basic theoretical knowledge, so that they can physically serve for the maintenance of the health of the people and the rehabilitation treatment of patients in the future, and become practical compound talents who have both "physical" and "prevention" knowledge.

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(2) Teaching method. "Giving priority to P.E. and combining P.E. with medical treatment" is completed in the physical education class of P.E. major, and its course includes two main parts: theory course and laboratory course. ① Theory course is designed to build a knowledge overlapping framework of "giving priority to P.E. and combining P.E. with medical treatment" for students; For example, biology and biochemistry in universities are sports physiology and sports biochemistry in P. E. Departments. The combination of the theory and practice of the two disciplines not only crosses the knowledge but also enriches the professional foundation. ② Laboratory course. The future sports workers should not only understand the methods to strengthen the body, but more importantly, give scientific health guidance to others. On the premise of developing students' physical quality in an all-round way, we should cultivate the skills and professional quality of "giving priority to P.E. and combining P.E. with medical treatment". Therefore, the teaching method of exercise prescription [5] is adopted to solve many problems related to physical development, with the main purpose of cultivating students' ability of exercise prescription and truly realizing the unity of teaching objectives, teaching contents and teaching process, as shown in Fig 1.

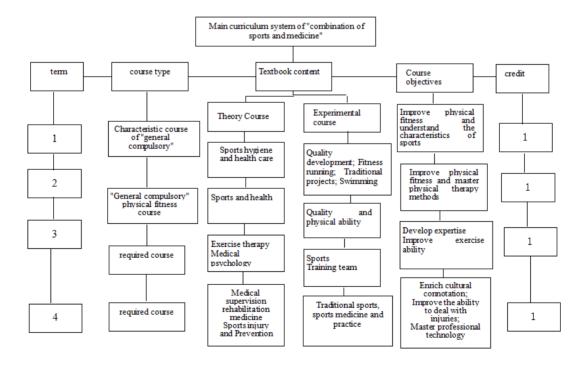


Fig 1: The main curriculum system diagram of "giving priority to P.E. and combining P.E. with medical treatment"

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2.2 Operation Procedures

Follow the requirements of the Guidelines for Physical Education Teaching in Colleges and Universities^[6].

- (1) It is a "compulsory course for general education" in the first year, and a "compulsory course" in the second year.
- (2) Students can get credits through exams when they have completed their classes according to the teaching plan.
- (3) The examination results of each semester are a combination of theory and practice, and calculated based on the hundred-mark system.

2.3 Evaluation System

- (1) Evaluation purpose. The primary purpose of the evaluation is to provide information for teachers to carry out the teaching of "giving priority to P.E. and combining P.E. with medical treatment". Putting evaluation in the whole teaching process, teachers should master students' learning needs, provide students with a way to demonstrate and discover different ways of cognition in a timely manner, and adjust teaching to improve students' learning performance in the next stage.
- (2) Evaluation contents. Starting from the evaluation of lesson plans, it is analyzed whether the teachers' proposal of lesson tasks, teaching principles, lesson structure, the assurance of teaching content and what methods can arouse students' interest are appropriate.
- (3) Evaluation method. The application of practical methods, such as: whether there is a solid basic teaching skill for "giving priority to P.E. and combining P.E. with medical treatment"; whether there are innovations in teaching ideas and teaching concepts; whether the teaching methods are flexible and diversified; what is the understanding of teaching materials and whether the design of teaching are scientific and reasonable and how about the teaching effect.

III. ACHIEVEMENTS OF "GIVING PRIORITY TO PHYSICAL EDUCATION AND COMBINING PHYSICAL EDUCATION WITH MEDICAL TREATMENT"

3.1 A Teaching Model with P.E. Characteristics of "Giving Priority to P.E. and Combining P.E. with Medical Treatment" is Formed

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The teaching goal and method of "giving priority to P.E. and combining P.E. with medical treatment" determines the characteristics of cultivating students with sports characteristics and the realization of the training goal. The experiment has proved that it has great advantages for the P.E. Departments in colleges and universities to set up the teaching model with P.E. characteristics of "giving priority to P.E. and combining P.E. with medical treatment", and it has expanded the space for the future employment of the students majoring in P.E.. From the perspective of future development, the teaching model with P.E. characteristics of "giving priority to P.E. and combining P.E. with medical treatment" is not only the only way for the future development of P.E. Departments in colleges and universities, but also the inevitable choice for the health needs of different groups after the national medical reform. From the point of view of the development and construction of P.E. teaching contents and forms, facilities and resources, and teachers' quality, after repeated experiments and hard exploration, abundant teaching resources will be obtained, and a teaching model with P.E. characteristics that accords with "giving priority to P.E. and combining P.E. with medical treatment" will be formed in colleges and universities, which will have important reference value for deepening the teaching reform of P.E. Departments in colleges and universities in the future [7].

3.2 The Purpose of "Giving Priority to P.E. and Combining P.E. with Medical Treatment" is Realized

The teacher listed the main content of the class and the practical content in professional work through the overlapping and infiltration comparison of the students' knowledge of "giving priority to P.E. and combining P.E. with medical treatment". The results showed that the importance of sports hygiene and health care (82%) and medical supervision (91%) (as shown in Fig 2) had been affirmed by students^[8].

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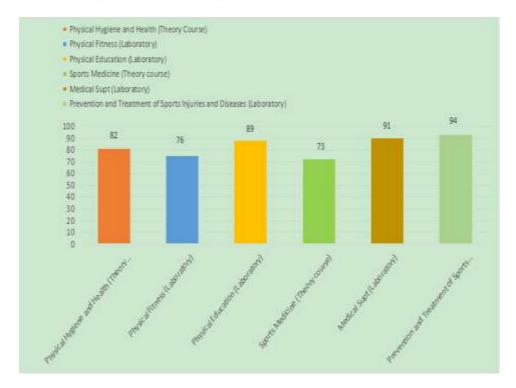


Fig 2: Evaluation of knowledge overlapping of "combination of body and medicine"

3.3 The Physical Health Condition of Students is Improved

The results of students' physical health test in the first year showed that the experimental class and the control class had significant differences in quiet heart rate, vital capacity, 800m running for women, 1,000m running for men and standing long jump (P<0.05). These values were significantly improved in the experimental class after the experiment (P<0.01). However, the students in the control class had no significant changes before and after the experiment (P>0.05), as shown in Fig 3.

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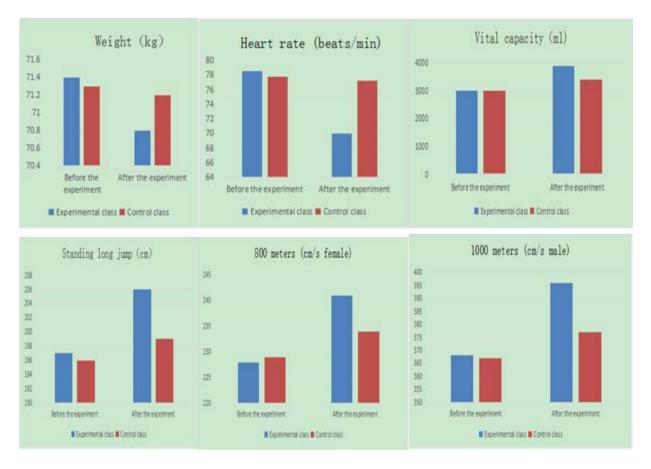


Fig 3: Comparison of physical health status between experimental class and control class before and after the experiment

IV. CONCLUSIONS AND SUGGESTIONS

4.1 Conclusions

Since the implementation of teaching model with P.E. characteristics of "giving priority to P.E. and combining P.E. with medical treatment" will help sports and medicine to play a greater role in optimizing lifestyle, preventing and controlling the occurrence of various common chronic diseases, improving the quality of life, and cultivating practical compound talents, it is a new carrier with high output benefit and low input level and will play an increasingly important role in sports health care, health medicine, preventive medicine and rehabilitation medicine. The development of science and technology as well as social progress have made people pay more and more attention to health. To train practical and compound talents with "giving priority to P.E. and combining P.E. with medical treatment" to provide high-quality health care services for the people can better reflect the ideological

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concept of "people oriented, health first", which is also an important sign of implementing the spirit of the 18th CPC National Congress.

4.2 Suggestions

- (1) Standardize the teaching management organization system of "giving priority to P.E. and combining P.E. with medical treatment". The teaching model with P.E. characteristics of "giving priority to P.E. and combining P.E. with medical treatment" should be brought into the school teaching track, with the vice-president in charge of teaching presiding over the daily work, the academic affairs office managing, organizing and supervising the work, and the sports department being the teaching management organization that implements the teaching plan and teaching tasks, organizes the implementation of teaching and teaching research, and carries out specific teaching management. Teaching plan management should be standardized, including the basic requirements of course teaching and course offering, selection of teaching materials, teaching methods, lecture notes and lesson plans, and course assessment system. Teaching management should be standardized, including curriculum arrangement and curriculum adjustment, teaching infrastructure management and teaching quality management, etc.
- (2) Build a teaching staff of "giving priority to P.E. and combining P.E. with medical treatment". Teachers are required not only to have the knowledge structure of "giving priority to P.E. and combining P.E. with medical treatment" and excellent education and teaching ability, but also to cultivate students' good ideological and moral character. Under the economic globalization, people's outlook on life and values are diversified today, so it is particularly important to strengthen teachers' responsibilities. In the process of carrying out the teaching work of "giving priority to P.E. and combining P.E. with medical treatment", teachers should educate and guide students to establish correct political direction and firm ideals and beliefs, and cultivate their sound personality and good medical ethics. Judging from the constituent elements of "giving priority to P.E. and combining P.E. with medical treatment" and the teaching requirements of their training programs, teachers must possess the following characteristics: ① noble ideological and moral character, i.e. correct political direction, firm professional thought, and the quality of teaching and educating people; 2 comprehensive professional work ability, namely, teaching and education ability, counseling and training ability, etc.; ③ extensive knowledge structure. In short, teachers should have a dynamic and complete "giving priority to P.E. and combining P.E. with medical treatment" knowledge structure, which needs to be updated continuously.

With the gradual deepening of national health reform, it has become an urgent need to maintain health, prevent diseases and give priority to prevention. The teaching model with P.E. characteristics

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of "giving priority to P.E. and combining P.E. with medical treatment" in comprehensive colleges and universities should take the demand of the country and society for practical compound talents of "giving priority to P.E. and combining P.E. with medical treatment" as the starting point, give full play to the advantages of school education resources, let the students in sports colleges and universities master the knowledge and methods of disease prevention and rehabilitation health care in body-building while building up their constitutions, improve their body-building cultural quality, and realize the application compound talents who can formulate "exercise prescriptions", which is not only a strong call to meet the needs of the public health and solve the problem of difficult and expensive to see a doctor, but also an inevitable trend of the development of P.E. Departments in colleges and universities under the background of medical reform.

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