

# Research on the Teaching Reform of Health Rehabilitation Course in Universities from the Perspective of Public Health Education

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**Abstract:** At the moment when public health issues are concerned, the teaching reform of health rehabilitation courses is of great significance. This article focuses on the health rehabilitation curriculum in universities from the perspective of public health education. Through in-depth analysis of the current situation of curriculum, teaching content and methods in many universities, it is found that there are some problems in the current curriculum, such as unreasonable curriculum, limited teaching content and single teaching method. Based on this, this article proposes to optimize the curriculum, adjust the proportion of class hours in each course, and increase the integration of characteristic courses; The teaching content should be updated by integrating new theories and cases in public health; teaching methods should be innovated through the use of case-based learning, group collaboration, and other diversified approaches; and the construction of the teaching staff should be strengthened to improve teachers' relevant competencies. Through these strategies, it is expected to improve the teaching quality of health rehabilitation courses and cultivate professionals who are more in line with the needs of public health education.

## 1. Introduction

In the process of globalization and rapid social development, the complexity and influence of public health problems are increasing day by day. From the sudden global epidemic of infectious diseases to the long-standing prevention and control of chronic diseases, the public health field is facing many challenges [1]. In this context, public health education has become a key way to enhance public health awareness and enhance the ability of society to respond to public health events [2]. As an important place to cultivate high-quality talents, the educational content of universities has a far-reaching impact on students' future behavior and decision-making in all fields of society [3]. The integration of public health education into the curriculum system of universities is not only the embodiment of the social responsibility of universities, but also the inevitable requirement of cultivating talents to meet the needs of the times.

As a course category closely related to students' physical and mental health, health care and rehabilitation courses in universities aim to teach students knowledge and skills in maintaining and promoting health, preventing diseases and rehabilitating treatment [4]. Under the framework of public health education, health rehabilitation curriculum has been endowed with new mission and connotation [5]. On the one hand, public health education points out the macro direction for health rehabilitation courses, and requires the course content and teaching methods to be consistent with the overall goal of public health [6]. On the other hand, as one of the concrete bearing forms of public health education in universities, health rehabilitation courses provide strong support for the realization of public health education goals through imparting professional knowledge and training practical skills.

However, it is not difficult to find a series of problems to be solved urgently by examining the current teaching situation of health rehabilitation courses [7]. In terms of curriculum design, the health rehabilitation curriculum system in some universities fails to fully consider the needs of public health education, and the lack of organic integration between courses makes it difficult for students to form a systematic health knowledge system and public health awareness [8]. In terms of

teaching content, traditional health care rehabilitation courses often focus on individual disease treatment and rehabilitation, and less on group health management and disease prevention strategies at the public health level, which cannot meet the diversified needs of public health talents in today's society [9]. The teaching method is also relatively simple, mostly based on traditional classroom teaching, and students' initiative and participation are insufficient, so it is difficult to effectively cultivate students' practical ability and innovative thinking. In view of this, it is urgent to carry out the research on the teaching reform of health rehabilitation courses from the perspective of public health education. This study aims to deeply analyze the internal relationship between public health education and health rehabilitation courses, accurately identify the problems existing in the current teaching process, and explore practical reform strategies. By optimizing curriculum, updating teaching content, innovating teaching methods and strengthening the construction of teachers, the health rehabilitation curriculum in universities can better meet the development needs of public health education and cultivate high-quality talents.

## 2. Analysis of the relationship between public health education and health rehabilitation courses

Public health education provides a clear direction for health rehabilitation courses. Public health education aims to cultivate the public's concern for group health and their ability to deal with public health problems. This orientation makes the course of health care and rehabilitation in universities not only limited to individual health maintenance and disease rehabilitation, but also to expand the field of vision to the whole social group [10]. Public health education focuses on cultivating students' sense of social responsibility and teamwork spirit, and health rehabilitation courses should also guide students to understand their roles in the public health system and learn to cooperate with different professionals to jointly promote the development of public health. See Figure 1 for specific guidance contents.

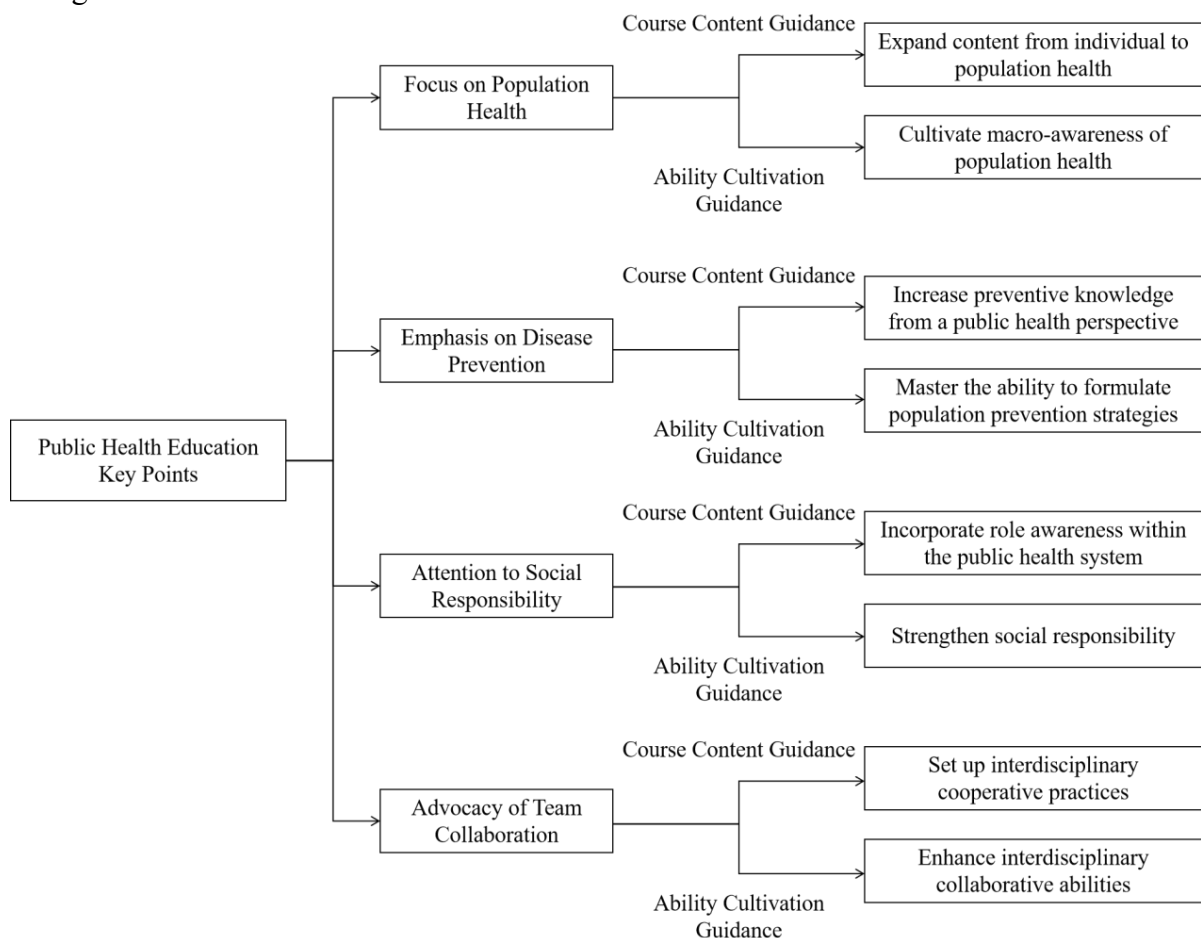


Figure 1 Guidance of public health education to health care and rehabilitation courses in universities

Health care and rehabilitation courses in universities have played a strong supporting role in public health education. The professional knowledge and skills taught by health rehabilitation courses are an important part of public health education. The knowledge of anatomy, physiology and rehabilitation techniques that students have learned in the course of health care and rehabilitation has laid a foundation for their in-depth understanding of public health problems. The practical teaching of health rehabilitation course is helpful to cultivate students' practical operation ability and problem-solving ability, which are also indispensable in public health practice.

The integration of the two is both necessary and feasible. From the point of view of necessity, with the increasing complexity of public health problems, the demand for talents with comprehensive health literacy is increasing. Only by deeply integrating public health education with health rehabilitation courses can we cultivate professionals who meet the needs of the times. From the feasibility point of view, both of them have the same goal and are committed to improving public health. And they have many intersections in content, such as disease prevention and health education, which provides a realistic basis for the integration of the two.

### 3. College health rehabilitation course teaching status and problems

#### (1) Curriculum setting

At present, many universities cover basic medicine, rehabilitation technology and other categories in health care and rehabilitation curriculum, but the curriculum structure and class time allocation are not reasonable. As shown in Table 1, most universities focus a lot of class hours on basic medical courses, such as anatomy and physiology, accounting for about 40% of the total class hours on average. However, courses related to public health, such as epidemiology and health statistics, account for a very low proportion, only 10%-15%. Although rehabilitation technology courses are involved, they are not systematic, and the connection between different courses is not close enough, which leads to the fragmentation of students' knowledge system and makes it difficult to form a complete thinking framework of health care and rehabilitation.

Table 1 Setup of Health Preservation and Rehabilitation Courses in Some Universities

Course Category	Average Proportion of Class Hours	Course Setup Characteristics
Basic Medical Courses (Anatomy, Physiology, etc.)	Approximately 40%	The content is detailed, but the proportion of class hours is relatively high.
Rehabilitation Therapy Technique Courses (Physical Therapy, Occupational Therapy, etc.)	Approximately 35%	There is a lack of effective connection between courses, and the systematization is insufficient.
Public Health-Related Courses (Epidemiology, Health Statistics, etc.)	10%-15%	The proportion of class hours is too low, and insufficient attention is paid.
Others (Sports Health Care, Health Education, etc.)	Approximately 10%-15%	The courses are scattered and lack integration.

#### (2) Analysis of teaching content

In terms of teaching content, the traditional health care and rehabilitation courses mainly focus on the diagnosis and treatment of individual diseases, but less on group health management and disease prevention strategies in the field of public health. In the aspect of disease prevention, it is mostly confined to the lifestyle intervention at the individual level, but the key contents of public health such as group immunization planning and the impact of environmental factors on health are not explained enough. For rehabilitation treatment, more emphasis is placed on the treatment technology for individual injuries, and how to carry out community rehabilitation and group rehabilitation services under the public health system is neglected. The limitation of this teaching

content makes it difficult for students to understand the importance and methods of health care and rehabilitation from the perspective of macro public health.

### (3) Application of teaching methods

In terms of teaching methods, most universities still give priority to traditional teaching methods. Teachers occupy a dominant position in the classroom, students passively accept knowledge and lack opportunities for active thinking and practice. This single teaching method is difficult to stimulate students' interest in learning, which limits the cultivation of students' practical ability, innovative thinking and teamwork ability, and is not conducive to students' coping with complex and changeable practical problems in future public health work.

On the whole, the curriculum of health rehabilitation courses has not been scientifically planned in full combination with the needs of public health education. The teaching content lags behind, which can not meet the social requirements for the ability of health care and rehabilitation talents in the field of public health. The single teaching method is not conducive to the improvement of students' comprehensive quality. These problems seriously restrict the role of health rehabilitation courses in public health education, and need to be solved urgently through teaching reform.

## 4. Teaching reform strategy of health rehabilitation course in universities from the perspective of public health education

### (1) Optimize the curriculum

The optimization of curriculum is the key to improve the fit between health rehabilitation curriculum and public health education. Universities should re-plan the curriculum structure and rationally allocate class hours. The proportion of repeated and outdated content in basic medical courses should be reduced, and the class hours for public health-related courses and characteristic courses that reflect the integration of healthcare and rehabilitation with public health should be moderately increased. The course adjustment plan is shown in Table 2.

Table 2 Optimization Table for Health Preservation and Rehabilitation Course Setup from the Perspective of Public Health Education

Course Category	Original Proportion of Class Hours	Optimized Proportion of Class Hours	Course Adjustment Explanation
Basic Medical Courses	Approximately 40%	Approximately 30%	Streamline repetitive content and highlight parts closely related to public health and health preservation and rehabilitation.
Rehabilitation Therapy Technique Courses	Approximately 35%	Approximately 30%	Emphasize the systematization and coherence between courses and strengthen the integration of practical links.
Public Health-Related Courses	10%-15%	Approximately 25%	Increase the depth and breadth of courses such as epidemiology and health statistics, and add relevant practical courses.
Integrated Featured Courses	None	Approximately 15%	Offer courses such as "Public Health and Health Preservation and Rehabilitation Practice" to cultivate comprehensive application abilities.

### (2) Update the teaching content

The teaching content should keep up with the development trend and actual demand of public health. In addition to traditional knowledge of health care and rehabilitation, new theories, technologies and typical cases of public health should be integrated. For example, when explaining the rehabilitation of diseases, the management cases of rehabilitation patients during the epidemic period are introduced to analyze the impact of public health measures on the rehabilitation process

and group health. The curriculum includes community health management and public health emergency rehabilitation plans, enabling students to master the key points of health rehabilitation across scenarios. Additionally, it highlights frontier trends such as the application of big data in public-health and healthcare-rehabilitation monitoring, thereby broadening their knowledge.

### (3) Innovative teaching methods

It is difficult for a single teaching method to meet the needs of training objectives, so diversified teaching methods are needed. The case-based teaching method requires teachers to select authentic public-health and healthcare-rehabilitation cases, guide students in analyzing and discussing them, and thereby cultivate the students' ability to solve practical problems. In addition, teachers can use virtual simulation technology to construct a virtual public health scene, so that students can practice health care and rehabilitation in the simulation environment and enhance their practical experience.

### (4) Strengthen the construction of teaching staff

Teachers are the executors of teaching reform, so it is very important to strengthen the construction of teaching staff. Universities should regularly organize teachers to participate in public health education-related training to improve their public health knowledge and teaching ability; Teachers are encouraged to join public-health practice projects to accumulate field experience that can be directly channeled into their teaching. At the same time, universities should introduce professionals with interdisciplinary background of public health and health care rehabilitation to enrich the teaching staff; A cross-disciplinary teacher-exchange platform should be established to facilitate the sharing of knowledge and pedagogical insights, driving joint efforts in instructional innovation. Through these measures, we will build a team of high-quality teachers who are not only proficient in professional knowledge of health care and rehabilitation, but also familiar with public health education, which will provide a strong guarantee for the teaching reform of health care and rehabilitation courses.

## 5. Conclusions

This article focuses on the teaching reform of health rehabilitation courses from the perspective of public health education. In today's society, public health problems are complex and changeable, which puts forward new requirements for talent training in universities, and the reform of health care rehabilitation curriculum is imperative. At present, there are many shortcomings in the teaching of health rehabilitation courses. In terms of curriculum, the proportion of basic medical courses is too high, and public health-related courses and integrated courses are missing, which leads to the imbalance of curriculum structure and makes it difficult for students to build a comprehensive knowledge system. The teaching content is limited to individual disease rehabilitation, ignoring group health management and public health prevention strategies, which can not meet the actual needs. The teaching method is mainly traditional teaching, and students' passive learning, practice and innovation ability are insufficient. In view of these problems, this article puts forward a series of reform strategies. The curriculum should be optimized by reasonably adjusting class hours and increasing integrated courses to build a more scientific knowledge structure for students. Teaching content should be updated by incorporating cutting-edge theories and practical cases, enabling students to keep pace with the development trends of public health. Teaching methods should be innovated through the use of case-based teaching, group cooperative learning, and other diversified approaches to stimulate students' initiative and enhance their teamwork abilities. The construction of the teaching staff should be strengthened by improving teachers' ability to integrate public health education with healthcare and rehabilitation through training and talent introduction. These reform strategies are expected to achieve better integration of health rehabilitation courses into public health education, improve teaching quality, cultivate high-quality talents with solid professional knowledge in healthcare and rehabilitation, strong public health awareness, and effective response capabilities, and provide robust talent support for the development of public health.

## References

- [1] Wang J, Wu Y, Yang H, et al. Construction of a new regional rehabilitation management system for high-risk infants based on general movements assessment technology[J]. *Maternal & Child Health Care of China*, 2023, 38(3): 439-443. DOI: 10.19829/j.zgfybj.issn.1001-4411.2023.03.014.
- [2] Qu K L, Gao M Z, Wang C X, et al. Application value and prognostic follow-up observation of early intervention based on health education and healthcare in high-risk infants with cerebral palsy[J]. *Guangdong Medical Journal*, 2020, 41(13): 1340-1343. DOI: 10.13820/j.cnki.gdyx.20192542.
- [3] Chen J L, Chu X L, Li Y, et al. Application value of health belief intervention in the rehabilitation stage of pediatric pneumonia patients[J]. *Maternal & Child Health Care of China*, 2021, 36(07): 1663-1665. DOI: 10.19829/j.zgfybj.issn.1001-4411.2021.07.063.
- [4] He A Q, Yu Y, Zheng S, et al. Relationship between education and utilization of basic public health services: the mediating role of social integration[J]. *Modern Preventive Medicine*, 2021, 48(09): 1609-1613. DOI: 10.20043/j.cnki.mpm.2021.09.017.
- [5] Huang Q. Comparative analysis and enlightenment of public health education between China and the United States[J]. *Modern Preventive Medicine*, 2023(12): 2295-2298. DOI: 10.20043/j.cnki.MPM.202302301.
- [6] Huang Q, Zhao L, Zhang N, et al. New reflections on institutional education for high-level applied public health talents in the new era[J]. *Modern Preventive Medicine*, 2023, 50(19): 3641-3648. DOI: 10.20043/j.cnki.MPM.202305432.
- [7] Wu Q H, Xu J, Wu L J, et al. Construction of an evaluation index system for resilience of primary healthcare workers in public health emergencies[J]. *Chinese Journal of Health Education*, 2024, 40(06): 531-537+574. DOI: 10.16168/j.cnki.issn.1002-9982.2024.06.010.
- [8] Fan X C, Ji X Y, Xiong Z H, et al. Knowledge structure and training model for interdisciplinary talents in public health and bioinformatics[J]. *Chinese Journal of Public Health*, 2025, 41(07): 892-896. DOI: 10.11847/zgggws1146202.
- [9] Liu S Y, Yin A C, Huang X M, et al. Current status and implications of undergraduate public health nursing education in Japan[J]. *Chinese Nursing Management*, 2020, 20(12): 1915-1918. DOI: 10.3969/j.issn.1672-1756.2020.12.034.
- [10] Qiang P J, Dou H L. Developmental implications of major public health emergencies for emergency ideological and political education[J]. *Chinese Medical Ethics*, 2023, 36(11): 1281-1286.