Teaching case construction in the field of medical care and health:Necessity, bottlenecks and future paths

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Abstract

Under the background of the Healthy China strategy, the construction of teaching cases in the field of medical care and health is of great significance. This paper systematically analyzes the urgency, feasibility, challenges and future development paths of the construction of teaching cases in the field of medical care and health. With the intensification of the global aging trend and the continuous growth of the number of patients with chronic diseases, the field of medical care and health urgently needs professionals with interdisciplinary knowledge and practical ability. However, the current teaching case resources are scarce and the update is lagging behind, which is difficult to meet the needs of cultivating high-quality talents. Therefore, this paper proposes to use the popularization of network technology, the diversification of multimedia technology and big data technology to broaden the channels for case collection, improve the authenticity and timeliness of cases, and establish a scientific quality assessment and update mechanism. At the same time, specific solutions are proposed for bottleneck problems such as data integration and copyright interest distribution. Looking forward to the future, by strengthening interdisciplinary cooperation and improving the practicality and pertinence of cases, it will help promote the continuous improvement of the quality of education in the field of medical care and health, and provide strong support for coping with the challenges of population aging.

Keywords: teaching cases; medical care and health; digital technology; artificial intelligence

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1. Introduction

With the increasing trend of population aging in China and the increasing burden of chronic diseases, the development of the medical and health care sector has become a focus of social attention [1] . This sector not only concerns the quality of life and well-being of the elderly, but also directly affects the stable operation of the social medical and health care system and sustainable economic development [2] . In this context , it is particularly important to cultivate medical and health care professionals with a solid theoretical foundation and excellent practical ability. Education, as a key link in talent training, the innovation and optimization of its teaching methods and means have become the key to improving the quality of education. Among them, teaching cases, as a vivid and intuitive teaching tool, have shown unique value and potential in the field of medical and health care education.

Medical and health care teaching cases can simulate or reproduce real scenarios and problems in the field , which not only helps students to deeply understand the theoretical knowledge of health economics , but also stimulates students' interest in practical exploration and cultivates their problem analysis and problem solving capabilities. In the process of case study and discussion, students can be exposed to the latest trends and practical problems in the industry, thereby enhancing their adaptability to the future professional environment. In addition, teaching cases also promote the integration and application of interdisciplinary knowledge, encourage students to use multi-angle and multi-level analysis methods, and cultivate critical thinking and innovative spirit [3] .

However, although the importance of teaching cases in medical and health education is widely recognized, my country faces many challenges in the construction of teaching cases in this field. On the one hand, high-quality and high-level medical and health teaching case resources are relatively scarce, which makes it difficult to meet the growing teaching needs; on the other hand, the update speed of existing cases is difficult to keep up with the pace of industry development, resulting in a disconnect between teaching content and practical applications. These problems not only affect the effectiveness of teaching, but also restrict the quality of training of medical and health professionals.

Therefore, strengthening the construction and research of teaching cases in the field of medical care and health, and exploring the development and application model of teaching cases that meet the needs of the times have become urgent issues to be solved in the current education field. This paper aims to deeply analyze the specific needs of the medical care and health field for professional talents, explore the important role of teaching cases in the training process, and evaluate the support of current technical conditions and teaching resources for the construction of teaching cases. On this basis, this paper will further analyze the bottlenecks and challenges faced by the construction of teaching cases in the field of medical care and health, such as the scarcity of case resources, uneven quality, and delayed updates, and propose corresponding solutions and development paths. This study will not only help enrich and improve the theoretical system of medical care and health education, improve the quality and effect of teaching, but also provide strong support for the cultivation of more high-quality medical care and health professionals, and contribute to the sustainable development of my country's medical care and health cause.

2. Necessity analysis of teaching case construction in the field of medical care and health

2.1 Specific needs and roles of professionals in the medical and health care sector

As the global population ages, the healthcare, elderly care, and long-term care insurance sectors are facing unprecedented challenges and opportunities. This requires not only responding to the growing demand for health services for the elderly, but also solving the complex problems brought about by the reform of the social security system, the allocation of medical and health resources, and the design of insurance products [4]. Therefore , the demand for professionals with interdisciplinary knowledge and practical ability is becoming more urgent. In the process of cultivating professionals in the healthcare, economics, insurance, sociology and other healthcare fields, teaching cases play a vital role. By introducing real or simulated teaching cases in the healthcare, elderly care, and long-term care insurance sectors, students can have a deeper understanding of the actual operation of the healthcare, and improve their practical and problem-solving abilities.

(1) Improve students' practical ability. By introducing real cases in the medical and health field, such as the service model innovation of a nursing home and the feedback of long-term care insurance products, students can participate in the analysis and discussion of the cases and simulate solving practical problems. This immersive learning method can greatly improve students' practical ability and enable them to better adapt to the future professional environment.

(2) Enhance problem-solving ability. Teaching cases often contain complex background information and multiple stakeholders, requiring students to use multidisciplinary knowledge for comprehensive analysis and judgment. For example, when analyzing the long-term care insurance system, students need to consider multiple dimensions such as policy goals, financial sustainability, and public acceptance, and put forward practical policy recommendations. This process not only exercises students' problem-solving ability, but also cultivates their innovative and critical thinking.

(3) Promote interdisciplinary integration of knowledge. Medical and health education cases are usually rich in wisdom from various academic fields such as economics, sociology and medicine, realizing the organic combination of liberal arts and science knowledge. With the analysis of such examples, students can not only deepen their understanding of the knowledge of various disciplines, but also clarify the relationship and interaction between different disciplines, and then make progress in the integration and innovation of knowledge in multiple disciplines such as medicine, economics and sociology. For example, when evaluating the quality of elderly care services, the physical health of the elderly can be objectively evaluated from a medical perspective and subjectively evaluated in combination with the satisfaction of the elderly with elderly care services. Finally, the two can be combined to obtain the quantitative evaluation results of the quality of elderly care services. Through this kind of case analysis, students can more thoroughly understand the connection and interaction of interdisciplinary cross-disciplines, thereby stimulating the potential for interdisciplinary knowledge integration and innovation. Taking the analysis of health management services for the elderly as an example, medical theory can be combined to evaluate their health status, economic theory can be used to explore the cost-effectiveness of services, and sociological factors can be taken into account, such as the potential impact of family relationships on health management.

2. 2 The specific problem of lack of high-quality teaching cases in current medical and health education

Although teaching cases play a key role in the training of talents in the medical and health field , the current teaching practice still faces the problem of shortage of high-quality teaching cases. This problem is specifically manifested in the following aspects:

(1) Cases in the field of medical care and health are scarce and outdated. In the field of

medical care and health teaching , a significant challenge is that as an emerging and rapidly evolving discipline, it is not easy to obtain teaching cases that match it, resulting in a relative shortage of available resources. For example, the Zhejiang Province's excellent teaching case "Integration of Medical Care and Nursing in Educational Classrooms to Promote Healthy Aging" was written in 2022. Part of the case content has not kept up with the development of the medical care and health industry, and cannot fully demonstrate the latest policy orientations, technological development trends and market dynamics. This situation limits students' opportunities to access the most cutting-edge knowledge and skills , which may in turn weaken their learning outcomes and practical abilities.

(2) Existing cases are insufficient in depth and breadth. Some examples incorporated into teaching are too simplified or limited, focusing only on a specific step or problem in the field of medical care and health, and failing to fully demonstrate the comprehensiveness and all-round perspective of the field. This limitation not only limits the potential of the cases to arouse students' interest and deepen their thinking, but also fails to fully satisfy students' desire for in-depth knowledge learning [5] .

(3) Current teaching cases are insufficient in terms of practical application and operability. Although some cases are detailed, they fail to fully integrate the needs of practical operation. As a result, when students discuss such cases, their analysis mostly remains at the theoretical level, and it is difficult to transform theoretical knowledge into specific action strategies [6] . This disconnect makes students feel helpless when facing real challenges and lacks effective problem-solving skills.

(4) The cases lack localization and pertinence. The medical and health systems of different countries and regions are different, so teaching cases should be localized and pertinent. However, some current teaching cases directly quote foreign experience or talk about it in general terms, lacking in-depth analysis of China's specific national conditions and pertinent suggestions. This makes it difficult for students to combine what they have learned with the actual situation in their own country during the learning process, affecting their learning effect and practical application ability.

3. The feasibility of building teaching cases in the field of medical care and health

3.1 Popularization of Internet Technology and Globalization of Case Resources

With the rapid advancement of Internet technology, the speed of circulation and sharing of global teaching cases has been unprecedentedly improved. Teachers can now easily access various online resource libraries, such as the China Professional Degree Case Center, the China Management Case Sharing Center, and the Harvard Business School Case Library, or explore professional platforms in specific fields, such as forums and blogs focusing on health care and elderly care, and academic literature databases such as China National Knowledge Infrastructure to search for the latest medical, elderly care, and long-term care insurance-related cases. These cases contain cross-cultural diversity and practical experience under different policy measures, covering a wide range of fields such as health care, elderly care services, and long-term care insurance, enriching the case database for teaching courses such as economics, sociology, and insurance. At the same time, in terms of online education platforms, tools such as massive open online courses (MOOCs) and learning management systems (LMS) provide strong support for teachers and students [7] . Teachers can use these platforms to upload and publish teaching cases, and students can conduct self-guided learning and participate in discussions anytime and anywhere. This flexible and changeable learning model not only enhances teaching effectiveness, but also catalyzes

cooperation and communication among student groups [8] .

3.2 Diversification of multimedia technology and vividness of case teaching

On the one hand, with the progress of multimedia technology, the creation of video cases has become a reality. By capturing real medical care scenes, expert lectures, patient interviews and other materials, teachers can construct video examples that are both vivid and concrete. These video materials not only help students to deeply understand the complex medical care procedures, elderly care skills and the deep background of long-term care insurance policies, but also enhance the interest and attractiveness of learning knowledge in the field of medical care and health . On the other hand, the integration of interactive simulation technology has further sublimated the case teaching method. Specifically, the innovative application of virtual reality (VR) and augmented reality (AR) technology has opened up a new dimension for teaching simulation in the medical care and health environment. Teachers can use these cutting-edge technologies to construct nearly real medical care scenarios, allowing students to perform practical activities and strategy simulations in virtual platforms. For example, the application of VR technology to reproduce the elderly care service supply process allows students to experience the various steps and details of providing services to the elderly; while AR technology can display the elderly's immediate feedback while students are performing service operations, deepening students' understanding of the essence of the medical care integration model. This type of interactive simulation teaching greatly enhances students' learning interactivity and effectiveness.

3.3 Social media and collaboration tools promote the depth and breadth of case discussions

On the one hand, taking social media platforms such as WeChat, Weibo, and Douyin, as well as collaborative applications such as DingTalk and Tencent Conference as examples, teachers and student groups have gained opportunities for real-time communication without boundaries. Teachers can build case analysis seminars in virtual spaces and attract new academic talents, industry authorities, and academic elites to participate. This instant communication mode not only deepens and broadens the dimensions of case discussion, but also accelerates the feedback loop process, making it more agile and effective. On the other hand, the dissemination and cooperation model of knowledge has been enhanced under the promotion of social media and collaborative technology [9] . Teachers can take this opportunity to invite professionals and scholars across multiple academic fields such as economics, sociology, and management to participate in the construction and discussion of cases, weaving an interdisciplinary cooperation network. This cooperation model not only enhances the connotation and practical application value of the case, but also catalyzes the process of academic dialogue and knowledge innovation.

3.4 Big data technology improves the scientificity and personalization of case teaching

In the field of teaching case construction, big data technology has exerted a significant positive impact on data acquisition and analysis. Teachers can use this technology to collect and deeply analyze data from multiple sources such as hospitals, nursing homes, and home and community elderly care service centers . These data cover diversified information such as patient health records, medical service processes, nursing effectiveness evaluations, and insurance claims cases. Through a rigorous data analysis process, teachers can reveal industry dynamics, identify key problem areas, and explore feasible solutions, thereby laying a solid empirical foundation for case creation.

In addition, in terms of enhancing personalized learning assistance, big data technology provides teachers with a powerful tool to understand students' learning patterns and interest trends [10] . With the help of a personalized recommendation system, teachers can plan tailored learning paths

and case materials for students. For example , the system will push relevant cases in fields such as medical care, elderly care, and long-term care insurance based on students' learning background and progress; at the same time, it provides a variety of learning resources based on students' personal interests, including video demonstrations, written case analysis, and interactive simulations. This initiative has greatly improved learning efficiency and student satisfaction.

3.5 Sustainability of teaching resources and teaching case construction

First, the case teaching faculty is constantly being strengthened. Some higher education and vocational education institutions are actively promoting the strategy of building a dual-mentor teaching team to achieve the educational advantage of integrating theory and practice . On the one hand, on-the-job professors with a solid theoretical foundation are selected to serve as theoretical instructors; on the other hand, elites from government departments and the industry are recruited to serve as practical teaching instructors to promote students' practical skills training and deepen the collaborative innovation and cooperation relationship between schools, governments, and enterprises [11] . Such teachers not only have a solid theoretical foundation, but can also integrate examples and experiences from real work environments into teaching content, greatly enriching teaching practice [12] . In addition, schools actively plan diversified development paths for teachers, such as domestic and international training visits, participation in academic seminars, and industry practice projects, in order to continuously improve teachers' teaching and research quality and case development capabilities.

fully optimize teaching facilities. The school is committed to deepening cooperation with medical organizations, nursing homes, home and community elderly care service centers and other institutions to jointly create internship and training platforms. These platforms are equipped with cutting-edge care and medical equipment,

simulated care center care environment and smart elderly care system, aiming to create a medical and health management service scenario close to reality for students. In addition, the digital teaching resources constructed by the school cover multiple forms such as electronic documents, online courses and virtual reality experimental classrooms, enriching students ' learning resource library.

Third, the cooperation between government, industry, academia and research institutes continues to deepen. In the context of cooperation between government, industry, academia and research institutes, the government, hospitals, nursing homes, home and community elderly care service centers and other departments have cooperated more deeply with schools. The above entities work together to develop teaching examples in the field of medical care and health, which can achieve resource sharing and complement each other's advantages. This can not only expand the case database, but also enhance the practical application value of the cases and their adaptability to specific scenarios. With the help of in-depth exchanges and cooperation between the government and various medical care and health institutions, we can immediately understand the trends and changes in demand in the medical care and health industry, laying a solid foundation for the iteration and improvement of teaching content.

4. Bottleneck analysis of teaching case construction in the field of medical care and health

4.1 Bottlenecks in data collection and integration

(1)Diversity of data sources and inconsistent standards . Data sources in the medical and health field are extremely extensive, covering government departments, hospitals, elderly care service centers, individuals and other channels . These data have significant differences in format, structure, accuracy and timeliness, which makes data integration extremely complicated. At the same time, the lack of unified data standards and exchange protocols

between different institutions has led to serious data islands, making it difficult to effectively aggregate and share data.

(2)Privacy protection and data desensitization . When collecting medical and health data, privacy protection is an issue that cannot be ignored. Data involving personal information, such as ID card numbers, are particularly sensitive and need to be desensitized in strict compliance with relevant laws and regulations. However, how to maintain the integrity and availability of data while protecting privacy has become a major problem in the data collection process. In addition, the selection and application of data desensitization technology also need to consider its impact on data analysis results.

(3)Data quality and integrity . The effectiveness and reliability of the case library are fundamentally constrained by data quality. In practice, given the variety and complexity of data sources, quality issues such as data loss, errors, and duplication are often encountered. These situations not only increase the difficulty of data purification and preprocessing tasks, but may also have a misleading effect on case analysis and decision making. Therefore, ensuring the high quality and integrity of data is the cornerstone of building a case library.

4.2 Bottlenecks in case quality and evaluation

(1)Case authenticity and representativeness . The key to building a case library is to ensure the authenticity and typicality of the cases. In practice, the diversity and uncertainty of information sources have caused troubles in the verification of case authenticity. In addition, the different backgrounds, conditions and results between cases have increased the difficulty of selecting typical samples. Therefore, it is particularly important to establish a sound case selection and verification system to ensure that the archived cases can reflect the facts and have broad representativeness. Taking the long-term care insurance teaching examples implemented in Tianjin and Dongying as an example, although both cities have promoted the insurance pilot and achieved certain results, their operational details and results show regional characteristics. This shows that in the case selection process, comprehensive consideration of these variables is crucial to accurately reflect the application scenario of a specific medical and health model. However, at the practical level, it is still a major problem to objectively and comprehensively define the typicality of the case, and subjective judgment and one-sided analysis are inevitable.

(2)Case replicability and operability . The potential for case reproduction and practical feasibility are key criteria for evaluating its value. However, the extensive complexity and diversity of the medical and health care field have led to uneven resource allocation, management efficiency, and personnel quality among various institutions , which in turn affects the consistency of case reproduction in different environments . Many successful cases are difficult to transplant directly across situations. In addition, the operational details and core elements of some cases may not be fully disclosed due to factors such as confidentiality requirements, which weakens the practical operability of the cases. Taking the long-term care insurance teaching examples implemented in Tianjin and Dongying as an example, although both places have explored relatively mature long-term care insurance operation frameworks, their feasibility for reproduction in other regions still needs to be further explored. This verification process requires a detailed study of the conditions, steps, and results of the case implementation, and a detailed comparative analysis. Not only is the procedure complicated, but it also requires the executors to have corresponding professional knowledge and practical experience. Therefore, during the collection and analysis of cases, attention should be paid to revealing the deep logical context and universal laws of the cases, and summarizing experience strategies that can be widely used.

(3) Establishment of a case evaluation mechanism . Building a reliable case evaluation system is the core link for case quality control. The system should involve multi-dimensional

considerations such as the authenticity, typicality, scalability and practicability of the case, and adopt a comprehensive evaluation method that combines quantitative and qualitative methods. However, in the specific implementation process, due to the diversity and subjectivity of the evaluation criteria, the evaluation conclusions are bound to cause controversy. Therefore, it is particularly important to build an evaluation framework that is objective, fair and transparent to ensure the accuracy of the evaluation conclusions and public trust.

4.3 Bottlenecks in sharing and application

(1)Copyright and profit distribution issues . The process of case resource sharing involves many sensitive issues such as copyright ownership and profit distribution. Since the copyright of different cases may belong to different entities, how to promote the exchange of case resources while maintaining the integrity of copyright has become a difficult problem that needs to be solved urgently. In addition, the sharing and practical application of cases often involve multiple stakeholders, and the rational allocation of these interests has become a key factor restricting the promotion of case databases and their application effectiveness. Therefore, building a clear copyright protection system and profit distribution mechanism is crucial to ensuring the legal circulation and efficient use of case libraries.

(2) Technical barriers and platform construction . The sharing and application of cases need to rely on advanced technical platforms and tools. However, in actual operations, technical barriers often become an important factor restricting the promotion and application of cases. For example, there are technical barriers to data exchange and sharing between different platforms; the retrieval, analysis, visualization and other functions of the case library need to rely on professional software and technical support; the maintenance and updating of the case library also requires a lot of manpower, material and financial resources. Therefore, it is necessary to strengthen technical research and development and platform construction to improve the sharing efficiency and application effect of cases.

Challenges in practical teaching applications . The application of case libraries in practice faces many challenges. On the one hand, due to the differences in teaching orientations of different universities, for example, colleges and universities emphasize the mastery of theoretical knowledge, while the scalability of vocational colleges may be limited ; on the other hand, the policy environment and market demand in the field of medical care and health are constantly changing, and cases need to be constantly updated and improved to adapt to new situations and needs. Therefore, it is necessary to broaden the scope of application of teaching cases, continuously update teaching cases according to the school's conditions , and improve the application value and influence of teaching cases in practical teaching .

5. Future Paths for the Construction of Case Databases in the Medical and Health Care Field

5.1 Strengthen the collection and organization of teaching cases

(1) Expand the channels for case collection and realize resource aggregation . First, make full use of Internet resources, including well-known professional databases, online case libraries, and academic paper libraries at home and abroad, and regularly search and screen the latest cases related to the medical and health field. These cases cover the practical experience of different countries and regions, and continuously provide students with diversified perspectives and rich materials. For example, when compiling the case of "Typical cases of embedding long-term care insurance into the medical and health service system to promote China's modernization", you can search for authoritative literature related to long-term care insurance through CNKI [13,14] . Under the guidance of teachers, you can clarify the importance of long-term care insurance from theory to practice. Secondly, establish close cooperative relations with

government departments such as the Medical Insurance Bureau and the Civil Affairs Bureau, medical institutions such as hospitals, home and community elderly care service centers, elderly care institutions such as nursing homes, insurance companies and other front-line units, and directly obtain fresh cases from the front line of practice through field visits, seminars, and symposiums. Finally, encourage students and teachers to use their vacations or spare time to participate in field research with the help of projects such as the Three Thousand Plan, and collect first-hand information through questionnaires, interviews, observations, etc. At the same time, if possible in the future, large-scale follow-up surveys can be conducted and a special research fund can be established to support teachers and students to take root in the field and summarize the current status and problems in China's medical and health care fields ; on the other hand, to conduct in-depth research in regions with advanced development in the medical and health care fields at home and abroad to obtain cutting-edge information, unique cases and learning experiences.

(2) Unify case organization standards and improve standardization . First, clarify the various links and steps of case organization, including case format, data cleaning standards, key information extraction methods, etc. Develop unified templates and guidelines to ensure the consistency of case content in terms of format, language, logic, etc. Secondly, classify and organize according to different fields in the medical and health field (such as medical services, elderly care, long-term care insurance, etc.), problem types (such as policy issues, technical issues, management issues, etc.) and solutions (such as technological innovation, model innovation, management innovation, etc.). Establish a case index and label system to facilitate users to quickly retrieve and locate the required cases. Finally, introduce artificial intelligence and big data technology to automatically process and analyze the collected cases. Use natural language processing technology to perform word segmentation, annotation, sentiment analysis, etc.

on case texts; use data mining technology to discover key information and potential laws in cases; use visualization technology to present case data and analysis results in the form of charts, graphics, etc. to improve the readability and attractiveness of cases.

5.2 Improve case update mechanism

(1) Establish a regular update plan . On the one hand, formulate a regular update schedule for the case library based on the development speed and teaching needs of the medical and health field. For example, you can set a certain number of cases to be updated every year or every semester to ensure that the case library can promptly reflect the latest developments and research results in the industry. On the other hand, set up a special case update team to be responsible for the screening, review and updating of cases. Team members should have rich knowledge and practical experience in the field of medical and health, and be able to accurately judge the value and applicability of cases. At the same time, the operation of the online contribution case library and database is inseparable from professionals with computer-related knowledge, which should be considered when forming a team.

(2)Track industry trends and adjust content in a timely manner . On the one hand, pay close attention to the policy orientations and reform measures of the national and local governments in the field of medical care and health, and adjust relevant policy cases in the case library in a timely manner to ensure the timeliness and accuracy of the case content. On the other hand, pay attention to technological innovation and application progress in the field of medical care and health, such as the application of artificial intelligence, big data, the Internet of Things and other technologies in the fields of medical care and elderly care. Collect and organize relevant cases in a timely manner to provide students with cutting-edge scientific and technological perspectives and thinking inspiration. At the same time, establish a user feedback mechanism for the case library to collect opinions and suggestions from teachers and students during

use. Continuously optimize and improve the case library based on the feedback results to improve the practicality and satisfaction of the cases.

(3)Use artificial intelligence technology to improve update efficiency . On the one hand, use artificial intelligence technology to intelligently screen and recommend massive cases. Through machine learning algorithms, analyze user behavior data and preference information, and recommend case resources that meet users' needs [15] . At the same time, the recommendation strategy can be automatically adjusted according to user feedback and learning progress to improve the pertinence and effectiveness of teaching cases [16] . On the other hand, develop an intelligent update system to realize automatic update and synchronization of the case library. When new medical and health teaching cases are added to the case library, the system can automatically complete data cleaning, format conversion, classification and sorting, and synchronize the updated cases to various teaching platforms and user terminals. Reduce the burden of manual updates and improve update efficiency and quality.

5.3Establish case quality assessment standards and processes

First, ensure the authenticity and accuracy of the case content. Verify the source and reliability of case information through multiple channels to avoid the emergence of false information and misleading content. Second, evaluate whether the case is representative and typical. Select cases that can reflect common problems, challenges and solutions in the field of medical care and health, and ensure that the cases can provide students with valuable reference and reference. At the same time, pay attention to the timeliness of the case. Select recent cases or classic cases that have stood the test of time to ensure that the cases can reflect the latest developments and development trends in the industry. Finally, evaluate the depth and breadth of the case analysis. Select cases that contain rich background information, detailed problem descriptions and comprehensive solutions to ensure that the cases can provide students with

opportunities for in-depth thinking and comprehensive analysis.

6.Summary and Outlook

This article deeply explores the necessity, feasibility, existing problems and improvement paths of teaching case construction in the field of medical care and health. By analyzing the demand for professional talents in the field of medical care and health and the key role of teaching cases in the training process, the necessity of teaching case construction is clarified. At the same time, combined with successful cases at home and abroad and technical support conditions, the feasibility of teaching case construction is systematically evaluated. This article also analyzes in detail the bottleneck problems existing in the current teaching case construction, such as data collection and integration, case quality and evaluation, sharing and application, and continuous updating and maintenance, and proposes corresponding solutions.

In the future, the Medical Care and Health Teaching Case Library will focus on the following aspects: First, strengthen the standardization and diversification of case collection and induction, and achieve efficient integration and application of resources by expanding source channels and unifying evaluation criteria; second , improve the case update system to ensure the modernity and cutting-edge nature of teaching case materials, and use artificial intelligence to accelerate this update process; third, build a rigorous and fair case quality evaluation system, and verify from multiple angles to maintain the high level and reliability of cases. In addition, with the close interdisciplinary collaboration and the deepening of resource sharing, the practical application value and problem orientation of teaching cases will be further enhanced .

In view of this, this article advocates deepening the research on medical and health data integration and privacy protection technology to enhance the practical value and protection of case

materials. At the same time, we should vigorously promote interdisciplinary collaboration and communication, work together to develop high-level teaching examples, and accelerate the dissemination and innovation of knowledge. In addition, we need to pay close attention to policy trends and technological progress in the field of medical and health, and adjust and update case materials in a timely manner to maintain the timeliness and advancement of case collections. On this basis, we should explore multi-channel funding support models, absorb a wider range of social capital to participate in the construction of case libraries, and provide solid support for continuously improving the quality of medical and health education. In order to cultivate more medical and health professionals with both profound theoretical knowledge and practical skills, we can contribute to effectively addressing the problem of population aging and promoting the comprehensive and healthy development of society.

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