

Research on the Development and Management Mode of the Sports Rehabilitation Industry in China - Based on Global National Experience

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Abstract. As a combination of sports, medicine and human health, sports rehabilitation will have great potential and market prospects in the future. As people pay more and more attention to their health and their education level is getting higher and higher, the sports rehabilitation industry will develop rapidly and effectively. The sports rehabilitation industry has also received strong support from national policies, with broad market prospects and continuous enrichment of market elements. This paper retrieves a large number of literature, using the method of comparative analysis, mainly from the analysis of the current development and management mode of China's sports rehabilitation industry, through the comparison with other countries in the world sports rehabilitation industry, draw experience, found that China's sports rehabilitation industry is different from other countries in the world, so as to explore the development mode and road suitable for China's sports rehabilitation industry, and promote the development of China's sports rehabilitation industry.

1 Introduction

Driven by the wave of global health, sports rehabilitation industry, as an important part of sports health industry, is gradually showing its huge market potential and development space in China. With the improvement of the national economy, the enhancement of national health awareness, and the growth of sports demand, sports rehabilitation has not only become a necessary medical service, but also gradually transformed into a normal demand in public life. This paper will be divided into three parts, the first part introduces the development status of China's sports rehabilitation industry, the second part is the development of China's sports rehabilitation industry, the third part is compared with other countries in the world, so as to give suggestions and elaborate.

2 The development and management mode of China's sports rehabilitation industry

2.1. The development process of China's sports rehabilitation industry

The sports rehabilitation industry is an industry combined with sports, and the sports rehabilitation industry in China started late and is not yet mature. Medical talents cannot clearly understand the common injuries in sports and how to help athletes recover to the

best competitive state. Although sports talents know the common injuries in sports and more scientific training methods, they lack rich medical knowledge. Therefore, China's sports rehabilitation industry lacks professional talents. China's sports rehabilitation industry began to sprout after 2008 and started in 2012. The hosting of the 2008 Beijing Olympic Games directly promoted the demand of China's sports rehabilitation industry and the cultivation of talents in the sports rehabilitation industry [1]. After years of development, China's sports rehabilitation industry has gradually been known by the public, and the service group has also been popularized from professional athletes to the public.

2.1.1 Development model and current situation of sports rehabilitation industry in China

The development status of China's sports rehabilitation industry is mainly explored from the distribution status, business model, service content and treatment methods. According to statistics from the Sports Rehabilitation Industry Alliance, the total number of sports rehabilitation stores in China in 2020 has reached 370, distributed in 28 provinces, municipalities and autonomous regions across the country, and 54 cities have at least one sports rehabilitation institution. In developed urban areas, the sports rehabilitation industry has developed rapidly, which is closely related to the local sports rehabilitation acceptance and consumption ability [1].

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At present, in terms of the nature of the opening of sports rehabilitation institutions in China, it can be divided into two modes: professional rehabilitation medical institutions and rehabilitation departments of general hospitals. Professional rehabilitation medical institutions are mainly aimed at professional sports injuries, which are more targeted and suitable for sports rehabilitation treatment of professional athletes. The focus of treatment is on the recovery of sports ability. The development of sports rehabilitation agency stores promotes the sustainable development of sports rehabilitation as the main means, which is essentially the social groups' taking of sports prescriptions and generating consumer purchase behavior, promoting sports consumption to make profits from it [2]. The sports rehabilitation market has great potential in China. It is predicted that China's health industry, including sports rehabilitation, will have an 8 trillion market size by 2025. Since 1978, some colleges and universities in China announced the recruitment of sports medicine majors, and the concept of recovering from injuries through motor function exercises has become more and more popular. So far, 53 colleges and universities across the country have opened sports rehabilitation majors, including the Capital Institute of Physical Education, Shandong Institute of Physical Education, Shanxi Medical University, Nanjing Institute of Physical Education, etc. In just 43 years, there has been a surge in sports rehabilitation professionals, resulting in the rapid development of the third type of industry, helping more patients to regain their health through sports to restore the function of the injured part after injury or surgery [3].

2.1.2 Sports rehabilitation institutions and enterprises

At present, the management and operation mode of sports rehabilitation institutions can be divided into single-store operation and chain operation. At present, among the rehabilitation Junior College institutions operated by the chain, brands such as Youfu, Medical Family, Rainbow Fish, Sports Chuang, Ran Ran, Dr. Sports Sports Doctor, Wuhan Ruiha Billy, etc. have relatively mature operation modes. At the same time, well-known general medical brands such as United Family, Parkway Medical, Obsidian Medical, and Jiahui Medical have also been involved in sports rehabilitation services [1]. These medical brands have enhanced their popularity through chain operation and promoted the development of China's sports rehabilitation industry to a certain extent.

2.2 Problems in the development of sports rehabilitation industry in China

With the continuous expansion and extension of related research such as "integration of sports and medicine", "integration of martial arts and medicine" and "sports medicine" in recent years, it has laid a solid foundation for the development of the sports rehabilitation industry. however, the development of the sports rehabilitation

industry is still in the stage of full-fledged market-oriented operation, and there are many bottlenecks. The basic elements of the integrated development of the sports and health industry mainly include institutional supply, industrial association, innovative development, and health promotion [2].

On the whole, there are still some problems in China's sports rehabilitation industry, such as the regulatory system is not perfect, the professional talents in the sports rehabilitation industry are few, and the industry level is uneven. Due to the constraints of policy systems, financial support, science, and technology, the integration rate between the sports rehabilitation industry, sports industry service industry, and health industry is low [4].

Secondly, the public's cognition of sports rehabilitation is not deep. The overall price of the industry is inflated, causing patients to flinch. As shown in Table 1, take Beijing as an example, the highest single price can reach 1500 yuan/hour, the lowest can be as low as 150 yuan/hour, and the price level is quite different .

Table 1. Price List of Sports Rehabilitation Studio in Beijing[5].

Name of institution	Unit price (times) Main audience	Unit price (times) Main audience
Department of Rehabilitation, the Third Hospital of North Medical College	120	Severe symptoms
Department of Rehabilitation, Union Hospital	150	Severe symptoms
Dr Chan Physical Rehabilitation Centre	1500	professional athlete
Shutan Sports Rehabilitation Center	600	professional athlete
Hongdao Sports Medicine Clinic	1500	Professional athletes, high-end
AT-Physical Governance Center	700	Trainee
Exercise Rehabilitation Studio	500	mass sports participants

There is a shortage of rehabilitation therapists. Qualified rehabilitation therapists need to have a professional background in medicine and sports. In recent years, the rapid expansion of the sports rehabilitation industry has exposed the problem of insufficient talent to the public. There are very few rehabilitation therapists with rich clinical experience [6].

According to the survey, at present, the training of sports rehabilitation talents in China is divided into sports rehabilitation majors in sports colleges and rehabilitation therapeutics in medical colleges.

Professional. According to the data of Xuesin Network, there are 79 colleges and universities offering sports rehabilitation and 178 colleges and universities offering rehabilitation therapy. Despite the high number of graduates each year, the rapid growth of the industry

track has made talent. The rate of cultivation has not kept pace with the expansion of demand, and the market is in short supply [6].

China's aging process has accelerated significantly. The results of the seventh census show that the number of people over 60 in China has reached 0.26 billion, accounting for 18.7 of the total population, and the proportion has increased by 5.44 percentage points. The population over 65 accounts for 13.5 of the total population. According to the classification standard of "population aging and its social and economic consequences" issued by the United Nations, China has entered a deep aging society. This is an opportunity for the sports rehabilitation industry, but it is also a challenge. Professional sports rehabilitation talents are increasingly important [7].

The public lacks awareness of sports rehabilitation, and it is found through field interviews that the public has limited awareness of sports rehabilitation. Most people think that it is a fitness coaching profession. Since most of the sports rehabilitation students in China have graduated from sports colleges, the public is right. Its learning ability and knowledge [8].

3 Development of the sports rehabilitation industry in other countries around the world

3.1 Development model and characteristics of the sports rehabilitation industry in Germany

Germany is a world leader in the field of sports rehabilitation and is one of the most developed countries in the world. Every year, a large number of professional athletes come to Germany for sports rehabilitation treatment. The German sports rehabilitation industry has the characteristics of orientation and hierarchy of rehabilitation goals, regular and detailed injury diagnosis, frequent and data of rehabilitation evaluation, continuity and tabletization of rehabilitation plans, and digitization of rehabilitation information [9]. The main advantages of the German sports rehabilitation system are advanced rehabilitation concepts; a sound sports medical service organization; a perfect training system; a strict job certificate system; targeted and professional rehabilitation personnel; advanced rehabilitation equipment, and various rehabilitation methods; significant characteristics of rehabilitation goals, diagnosis, evaluation, planning, etc.

Germany has also improved the development model of sports rehabilitation, especially in the training of sports and medical talents, focusing on the interdisciplinary training system, innovating the training mechanism of sports rehabilitation talents, and laying a solid foundation for the development of the sports rehabilitation industry. Germany has a large sports population and has organized many sports clubs and rehabilitation centers. To promote the development of for-profit organizations and the government and citizens to form a win-win situation, it has introduced

compulsory medical insurance and formed a practical development model with sports rehabilitation characteristics [2].

3.2 The development model and characteristics of the sports rehabilitation industry in the United States and other European and American countries

The United States and other European and American countries have perfect, for example, the three-level rehabilitation medical service system in the United States is roughly divided into acute rehabilitation institutions (including inpatient rehabilitation institutions), post-acute treatment institutions (including professional nursing institutions, etc.) and long-term care institutions (rehabilitation clinics and community clinics, etc.). According to data in Table 2, there is a certain gap between the number of sports rehabilitation institutions in China Europe, and the United States.

Table 2. Comparison of the density of sports rehabilitation institutions between China and Europe and the United States[1].

	United States	Australia	France	China
Total population (billion)	3.27	0.25	0.67	13.8
GDP per capita (ten thousand yuan)	6.5	5.5	4.0	1.0
Per capita disposable income (\$million)	4.5	3.6	2.2	0.44
Number of institutions providing sports rehabilitation services	38800	8000	5000	370
Mechanism density	1 family/8400 people	1 family/3100 people	1 family/13400 people	1 family/3.62 million people
Number of Therapists	100000+	40000+	30000+	150000+ (including public hospital therapists)

The training of sports rehabilitation talents in China has not reached the level of European and American countries. Through the study, it is found that Canada, the United States, England, and other countries have a certain basic and advanced nature in sports rehabilitation research, and the research institutions show the phenomenon of collaboration and sudden increase. The

research focuses on the professional role and effective communication ability of rehabilitation students in teamwork, long-term rehabilitation of the disabled, inter-professional learning, and comprehensive nursing ability of rehabilitation students [10].

3.3 Development model and characteristics of the sports rehabilitation industry in Japan

Since 1988, instructors who understand medicine and can guide sports and fitness have been trained. In 2000, the "Healthy Japan 21" program, also known as the "21st Century National Health Promotion Campaign", is the "third national health promotion plan" implemented by Japan. In 2006, the "Health Exercise Instructor Training and Popularization Program" was promulgated to enhance the external guidance of scientific fitness and promote the development of national scientific fitness, and the "integration of sports and medical care" to boost the sports rehabilitation industry is an important experience in the implementation of Health Japan 21. Especially in the period of promoting the integration of sports and medical care, Japan advocated the scientific fitness model of a "combination of sports and medicine", invested a lot of money, and established medical care centers and large-scale health diagnosis and treatment centers, not only for the national department Learning sports provides guidance and paves the way for the promotion of sports rehabilitation industry [4].

Japan is one of the most aging countries in the world.

First, as of September 2022, Japan's total population is 124.4 million, of which 36.27 million are elderly people over 65 years old, accounting for 29.1 percent of the total population, up 0.3 percentage points from the previous year (28.8 percent), a record high, marking that Japan has entered a super-aging society [7]. In this context, the health of the elderly is particularly important. The demand for sports rehabilitation talents has increased dramatically. The Japanese government strongly supports the training of sports rehabilitation talents. The "two-knife flow" talent training mode has been constructed, and the sports rehabilitation major is required to cultivate "sincere and sincere" professionals who have professional positions, I. e. combat power, and can lead career changes. Graduates should have rich creativity and high practical ability [7].

Developed countries pay more attention to the high-quality development of sports rehabilitation, and systematically make the coupling development path of sports rehabilitation and sports industry competitive growth from the aspects of development motivation, overall planning, competitive advantage, and so on. Through the linkage development of the industrial integration and interaction between sports rehabilitation talents and the medical industry, circulation drives the endogenous demand and external pulling force of the sports rehabilitation industry, improving the status and role of the sports rehabilitation industry in the national economy [2].

4 Recommendations

4.1 From the social level

To establish a scientific concept of sports rehabilitation. Improve the public awareness of sports rehabilitation. To enhance the state and the government's emphasis on sports rehabilitation to build a nationwide sports medical system [9]. To speed up the construction and development of sports rehabilitation institutions to establish professional sports hospitals in key cities across the country or to establish special sports rehabilitation institutions jointly with certain hospitals to solve the current problem of the lack of sports rehabilitation institutions in China to strengthen the construction of medical teams in the backward areas where athletes are more concentrated [9].

4.2 From the government level

The government further strengthens the health promotion work; improves the health education system and health management system of the whole society, and further focuses on strengthening departmental coordination, financial support, scientific and technological transformation, encouraging innovation and strengthening supervision. Product sports rehabilitation services, establish brand awareness, strengthen linkage with hospitals, improve the talent training system, ground community cooperation, develop rehabilitation derivative products, accelerate the optimization and integration of resources, break the technical barriers between industries, promote the innovation of sports fitness and sports management mode, and cultivate high-quality sports health operation organizations [2]. As far as possible, the rehabilitation treatment project should be included in the medical insurance, to improve people's happiness in life and promote people's cognitive level of sports rehabilitation.

4.3 From the level of personnel training

China should be trained to keep up with the industry and market demand, and cultivate compound talents.

International and local learning: expand communication and cooperation channels, and cultivate leading talents.

Theory and practice are embedded: optimizing curriculum and teaching design to cultivate applied talents.

5 Conclusion

At present, China's sports rehabilitation industry is still in the process of development, the road of development is tortuous, but the future is bright. China's sports rehabilitation industry is also considered to be a sunrise industry, with great potential for development. In the process of development, China can learn from the development experience of other countries in the world,

constantly enhance the influence of sports rehabilitation industry in China, and promote the development of China's sports rehabilitation industry. On the one hand, China should actively cultivate Chinese sports rehabilitation talents, on the other hand, China should create a good environment. It is necessary to combine the power of the government and the public to jointly promote the development of China's sports rehabilitation industry.

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