

Reconsideration of Exercise Prescription in the Context of “Healthy China 2030” Blueprint

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Abstract: On the basis of “Healthy China 2030” Blueprint, this paper conducts an in-depth analysis of the current situation of insufficient physical activities on the background of China’s social development, explores the role of exercise prescription in improving the performance of the national’s functional quality during national fitness and physical medicine integration, provides reasonable exercise advice and programs for different populations, and analyzes and summarizes the development trend and direction of exercise prescriptions.

Key words: Exercise prescriptions, Exercise Is Medicine, development advantage.

In order to boost the construction of a healthy China and improve people’s health conditions, the “Healthy China 2030” Blueprint was formulated in accordance with the strategic plan of the Fifth Plenary Session of the 18th Communist Party of China (CPC) Central Committee. The Blueprint clearly stated that it is necessary to “extensively carry out the national fitness campaign, consolidate physical medicine integration and non-medical health intervention and advocate physical activities among target population” in order to improve the health of the whole nation. This important argument not only clarifies the value of carrying out national fitness activities, but also provides methodological guidance for the execution of the nationwide fitness program, that is, through the construction of prescribed exercise system to improve the national health index.

1. Social Development Need

With the development of China’s economy and society and the intensification of population aging, it is estimated that by 2050, China’s aging population will reach a peak of 487 million, accounting for 34.9% of

the total population [1]. At the same time, the accompanying health problems of the elderly have also posed great challenges to health workers: chronic diseases will be the biggest obstacle for the health of the elderly. Epidemiology shows that inadequate physical activity is one of the important independent risk factors for chronic diseases and is closely related to the complications of cardiovascular diseases. “Exercise Is Medicine” is a health promotion project by sports initiated by ACSM and the American Medical Association in 2007, which holds that physical exercise plays a positive role in the treatment of chronic diseases, and is also the optimal intervention and adjuvant treatment of chronic diseases in the elderly from the perspective of economics and pain relief [2].

2. Advantages of Exercise Prescriptions

National health status can be assessed based on physical fitness, including: cardiopulmonary endurance, muscular strength and endurance, flexibility, body composition and so on. Among the most closely correlated indicators with health, cardiopulmonary endurance accounts for 50% of the weight. In the aerobic exercise tracking study of 3,120 women and 10,224 men, cardiopulmonary endurance was divided into three levels: medium, low, and high. It

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was found that the number of deaths with moderate endurance was similar to that with high cardiopulmonary endurance, while the number of deaths with low cardiopulmonary endurance level was several times higher than those with medium and high endurance [3-5]. Exercise is the foundation for promoting human health. As the saying goes, “no exercise, no health.” During exercise, the scientific means and methods of sports can effectively enhance national’s physical fitness and function.

Fitness exercise prescription refers to a scientific, standardized and systematic phased exercise plan based on the individual’s physical conditions under the premise of respecting individual differences. It is a periodic exercise plan formulated in the form of prescription on the basis of the data measured before a participant participates in the training and different training purposes, with appropriate amount of intensity, time and frequency for the participant to follow. The scientific, targeted, and systematic nature of fitness exercise prescription is very helpful in respecting the individual differences of participants. Therefore, offering different groups of people reasonable exercise advice and programs is the biggest advantage of exercise prescription. In addition, according to the feedback of participants, appropriate adjustments should be made to the exercise prescriptions in order to better enable exercise prescriptions to bring their superiority into full play and better serve the general population.

3. Development Trend of Exercise Prescriptions

For some diseases caused by lack of exercise including osteoporosis, degenerative arthritis, muscular dystrophy, cervical spondylosis, scapulohumeral peri arthritis, waist and leg pain, etc., and some modern civilized diseases related to lack of exercise, such as heart disease, hypertension, diabetes, gastric ulcer, obesity, neurosis, cerebrovascular diseases, etc., so far there is still no specific medicine.

Early in 2007, the American College of Sports Medicine launched the “Exercise Is Medicine” project, whose aim is to promote universal health and prevent chronic diseases by increasing physical activities, and encourage doctors to gradually incorporate exercise prescriptions into the US health care system as part of the treatment plan for chronic diseases [6-8]. The lifestyle of proactive fitness plays a very important role in people’s health. Preventing and treating modern civilized diseases has become a common task of fitness prescriptions. Exercise prescriptions have become an important part of the health plans in various countries. And in accordance with the current development trend, the task of exercise prescriptions has also evolved from single fitness to the pursuit of comprehensive physical and mental health. Scientific and rational sports not only promote physical fitness, but more importantly, play an important role in preventing, delaying and treating chronic non-infectious diseases.

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