

HOME EXERCISE AND POST-PANDEMIC RISK MANAGEMENT

EXERCÍCIO FÍSICO DOMÉSTICO E GERENCIAMENTO DE RISCOS PÓS-PANDEMIA

EJERCICIO EN CASA Y GESTIÓN DE RIESGOS EN LA POSTPANDEMIA



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Jinmeng Ma¹ 
(Physical Education Professional)

1. Zhengzhou Technology and Business University, School of Physical Education, Zhengzhou, Henan, China.

Correspondence:

Jinmeng Ma
Zhengzhou, Henan, China.
450000.
17605061695@163.com

ABSTRACT

Introduction: Post-pandemic has made people increase their search for preventive health. Even in limited places, there is also a need to perform the proper physical exercise to improve fitness and promote health. **Objective:** Research the mode of home exercise and study the risk management of such exercise. **Methods:** According to the perspective of home exercise, this paper analyzes the benefits and methods of exercise, to call everyone to enhance exercise in the post-pandemic. **Results:** After testing, this method can improve physical quality, relieve anxiety, promote physical and mental health, strengthen sports cognition, and promote the harmonious development of society. **Conclusion:** Physical exercise can give us a good quality of life; the greatest success is living healthily. This epidemic has made society more aware of the value of sports and their importance to health. **Level of evidence II; Therapeutic studies - investigating treatment outcomes.**

Keywords: Epidemics; Sports; Risk Management.

RESUMO

Introdução: O pós-pandemia fez as pessoas aumentarem a busca pela saúde preventiva. Mesmo em lugares limitados, também há a necessidade de realizar exercícios físicos adequados para melhorar o estado físico e promover a saúde. **Objetivo:** Pesquisar o modo de exercícios físicos domésticos e estudar o gerenciamento de riscos desse tipo de exercícios. **Métodos:** Segundo a perspectiva do exercício em casa, este artigo analisa os benefícios e métodos de exercício, com o objetivo de chamar a todos para aprimorar o exercício físico no pós-pandemia. **Resultados:** Após os testes, este método pode melhorar a qualidade física, aliviar a ansiedade, promover a saúde física e mental, fortalecer a cognição esportiva e promover o desenvolvimento harmonioso da sociedade. **Conclusão:** O exercício físico pode nos fazer ter uma boa qualidade de vida, sendo o maior sucesso viver saudavelmente. Esta epidemia tornou a sociedade mais consciente do valor esportivo e de sua importância para a saúde. **Nível de evidência II; Estudos terapêuticos - investigação dos resultados do tratamento.**

Descritores: Epidemias; Esportes; Gestão de riscos.

RESUMEN

Introducción: La postpandemia ha hecho que la gente aumente su búsqueda de salud preventiva. Incluso en lugares limitados, también es necesario realizar un ejercicio físico adecuado para mejorar la forma física y promover la salud. **Objetivo:** Investigar la modalidad de ejercicio en casa y estudiar la gestión de riesgos de dicho ejercicio. **Métodos:** De acuerdo con la perspectiva del ejercicio en casa, este trabajo analiza los beneficios y los métodos del ejercicio, con el objetivo de llamar a todos a potenciar el ejercicio físico en la postpandemia. **Resultados:** Tras las pruebas, este método puede mejorar la calidad física, aliviar la ansiedad, promover la salud física y mental, fortalecer la cognición deportiva y promover el desarrollo armonioso de la sociedad. **Conclusión:** El ejercicio físico puede hacer que tengamos una buena calidad de vida, y el mayor éxito es vivir de forma saludable. Esta epidemia ha hecho que la sociedad sea más consciente del valor del deporte y de su importancia para la salud. **Nivel de evidencia II; Estudios terapéuticos - investigación de los resultados del tratamiento.**

Descriptores: Epidemias; Deportes; Gestión de riesgos.



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INTRODUCTION

The outbreak of COVID-19 has made many people understand the importance of good health for a while. Home exercise became a hot spot during this period, which shows people's desire for health during epidemic prevention.¹ Sports can improve physical immunity, help regulate emotions, promote mental health, improve individual and even national happiness, help people who have experienced the epidemic release pressure, and help maintain social order.² With the

effective control and gradual improvement of the epidemic situation, we have ushered in a "post epidemic era".³ In the "post epidemic era", the home movement has also achieved sustainable development. As home sports are aimed at the general public, people of all ages can participate in them.⁴ In terms of training content and practice methods, people usually choose relatively simple movements.⁵ Practitioners can choose appropriate exercise methods for daily exercise according to their own characteristics and living conditions. On the one hand, it can

strengthen the physique and improve self immunity, so as to promote the healthy development of body and mind.⁶ On the other hand, it can promote the mastery of sports skills. However, due to the “bombing of exercise knowledge” brought about by the diversification of the mass media during the epidemic, the lack of knowledge of the public’s related disciplines, the limitation of the dissemination of official sports knowledge, and the difference in exercise cognition of sports participants, many hidden and potential risks have also been generated when the home exercise mode is carried out.⁷ Whether from the perspective of physiology, sports psychology or training, the “dislocation” of information and “confusion” of knowledge output in the home state will lead to the increase of exercise risk.⁸

The practical significance of home exercise in the context of the epidemic

The rapid outbreak of the new crown pneumonia epidemic across the country and the world has caused certain regions to quickly enter a dormant state of “epidemic period”.⁹ Due to the need to fight the epidemic and isolate the virus, after the outbreak, from urban streets and communities to rural fields and intersections, there are checkpoints and mobilizations for epidemic prevention and control everywhere in China.¹⁰ In the state of home isolation, due to the needs of people’s daily life and physical activities, physical exercise has ushered in the highlight of its value, which in turn promotes the “isolation” of physical exercise into a new model. (Figure 1) The “home exercise” in this study refers to the physical activity process in which there is no medical taboo to go out and become obsolete at home every day, and the existing venues, facilities and equipment at home are used to take corresponding physical exercise methods to develop the body, improve technology, strengthen their own physique, and make their physical and mental health develop.

With the isolation of the public at home, other factors affecting sports value recognition have been naturally weakened, the concept of physical health has become the “substantive” guarantee for all activities, and the positive value of physical exercise on physical health has been highlighted. From the physiological point of view, timely home exercise can be conducive to the maintenance and growth of human bones, muscles and other motor organs, and also plays a positive role in enhancing cardiopulmonary function. At the same time, it also has a significant effect on improving the functional status of the human blood circulation system, respiratory system and digestive system, so as to improve the disease resistance, immunity and adaptability of the human body.

Home exercise can enable them to exercise according to the conditions at home after work, so as to increase their exercise time, effectively alleviate the contradictions between work and life, reduce the pressure of work, and promote physical and mental health. In addition, taking appropriate exercise methods at home according to the needs of special groups and their own particularity can meet their rehabilitation needs and effectively save their living costs. On the other hand, home exercise can effectively enhance the self-confidence of special groups, so as to achieve the goal of home exercise promoting physical and mental health.

The study is Purely observational studies which no need to registry ID of ICMJE, and all the participants were reviewed and approved by Ethics Committee of Zhengzhou Technology and Business University, China (NO. 2022011)

Sports Risks

Sports risk is the risk problem existing in sports. Specifically, these sports risks include not only bruises, bruises, falls, etc., but also coma, fracture and even death. Most people do not have a correct understanding of the possible risks in sports. Home sports risk has the characteristics of objectivity and predictability, so in the construction of home sports risk prevention mechanism, we should start from the factors affecting home sports safety at different levels. In home sports activities, human factors are mainly composed of behavioral factors and psychological factors. Home isolation has changed the law of people’s daily life. Due to the increase of leisure time, the narrowing of activity areas, and the single form of activities, especially the isolation at home, people facing economic, family and other pressures are prone to communication contradictions and psychological anxiety. In addition, for the ordinary people, although the participation of scientific fitness has increased, there is a lack of Science in the design of fitness plans and the regulation of exercise intensity.

Sports activities in the epidemic period, as a special form of exercise that breaks the inherent form in a specific period, have more obvious risk characteristics and are more likely to “mutate”. In addition, different age groups have different personalized requirements for exercise content, and fragmented or packaged knowledge is not conducive to exercise audiences to make simple and accurate choices for sports content. From the perspective of time and space, home physical exercise has certain limitations. The environment at home or the artificial environment around it will limit the exercise of the public and increase the risk of sports to a certain extent. Only by constructing a perfect risk management scheme can sports bring people the greatest health, give play to the value of sports and avoid sports risks.

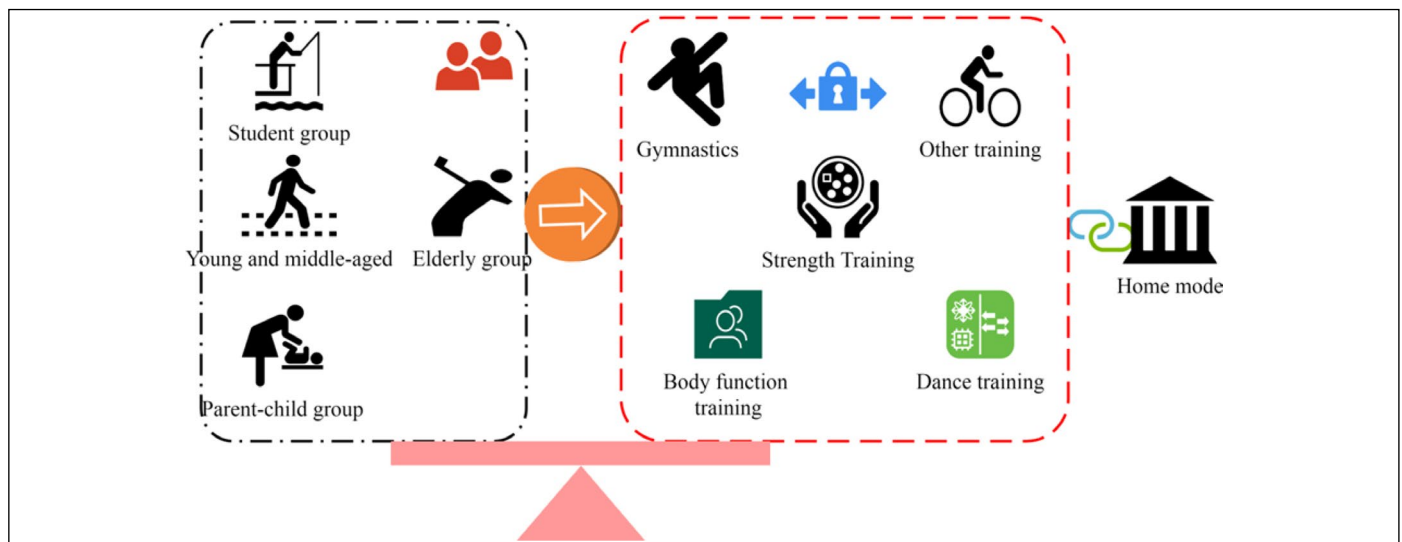


Figure 1. Formation mechanism of physical exercise at home mode.

Exercise risk management strategies under the stay-at-home model in the post-epidemic period

In the context of the outbreak of COVID-19, the traditional physical exercise model has been subversive. Sudden public health events have not given every field of society, including the sports industry, the opportunity to prepare. The Internet development model supported by big data and cloud information has rapidly spawned the “adaptation mechanism” of physical exercise under the home mode. In the face of such a situation, in the future, we can help the masses to establish a correct concept of fitness by making full use of all channels, including the emerging we media groups and mainstream media, to publicize in offline communities, units and schools. In particular, we can take advantage of people’s current attention to the epidemic, place the fitness information column in the network platform and the epidemic information column in the health section, and close the relationship between health and fitness in people’s hearts. From the perspective of the whole operation mode of home physical exercise during COVID-19, it mainly includes the output of exercise knowledge, the dissemination under the Internet mode, the reception of various groups, the participation of the public in exercise and the reflection of the effect. According to the problems and potential negative effects in each link, the risk management mechanism for home exercise under the epidemic background is formulated. (Figure 2)

When participating in home fitness, the longer the exercise time is, the better the exercise intensity is, and the higher the frequency is, the better. You should adjust the intensity, frequency and duration of your exercise according to your physical and psychological conditions. When exercising at home, most people will think that they are too familiar with the home environment, which will easily lead to ideological laxity and make it difficult to find some potential dangers at home. In addition, due to lack of effective supervision during exercise, if dizziness, chest tightness, nausea and other symptoms occur or any physical discomfort is found, stop practicing immediately.

Through the choice of diversified fitness methods, the public can be promoted to actively participate in home exercise to a certain extent. On the other hand, it can also make everyone’s exercise more scientific, reasonable and effective. Such a diverse source of exercise knowledge and information can play a very good role in promoting the exercise mode, exercise load and exercise safety of home exercise. Strengthen the training of fitness talents, strengthen the interdisciplinary construction

of sports, medical care and psychology, train compound talents, scientifically and correctly guide home sports, and promote the sustainable development of home sports. Secondly, scientific and correct fitness guidance is conducive to people mastering correct technical movements and developing good exercise habits.

In the implementation of the national strategy of national fitness for all, measures have been taken to use cloud computing, big data and other technologies to promote and popularize fitness programs, develop and enrich the database of exercise prescriptions, improve the scientific fitness effect of the masses, and vigorously promote exercise prescriptions suitable for different groups of people. It is very necessary to establish a sports prescription resource base for different groups on the premise of exercise knowledge output, action content selection and content suitability.

Improve the monitoring of exercise process and the evaluation and feedback of exercise effect. Due to the limitation of home and the narrowing of space environment, people’s feedback during exercise and evaluation of exercise effect are chaotic and weak. Based on this, establishing a simple evaluation system and feedback mechanism for the physical exercise process under the home mode is a key move to control the risk of home exercise.

CONCLUSIONS

In the face of emergencies or the external environment does not allow people to go out, the public can complete daily exercise through home exercise, so as to strengthen their physique and improve their immunity. The choice of home exercise methods should be based on their own characteristics, existing conditions at home and their own needs. Strictly follow the guidance method of scientific exercise, do a good job of preparatory activities and relaxation activities to avoid or reduce sports injuries. With the variation of the virus and the recurrence of the epidemic in many parts of the country, as well as the overall requirements of the national “dynamic zero” epidemic prevention and control, the home-based model and home-based physical exercise will gradually become the “new normal”. In this context, looking into the trend of physical exercise mode in the post epidemic era and improving the fitness mechanism of physical education have become the fundamental solutions to solve the current thorny problems and long-term development. For this reason, it is necessary for the sports

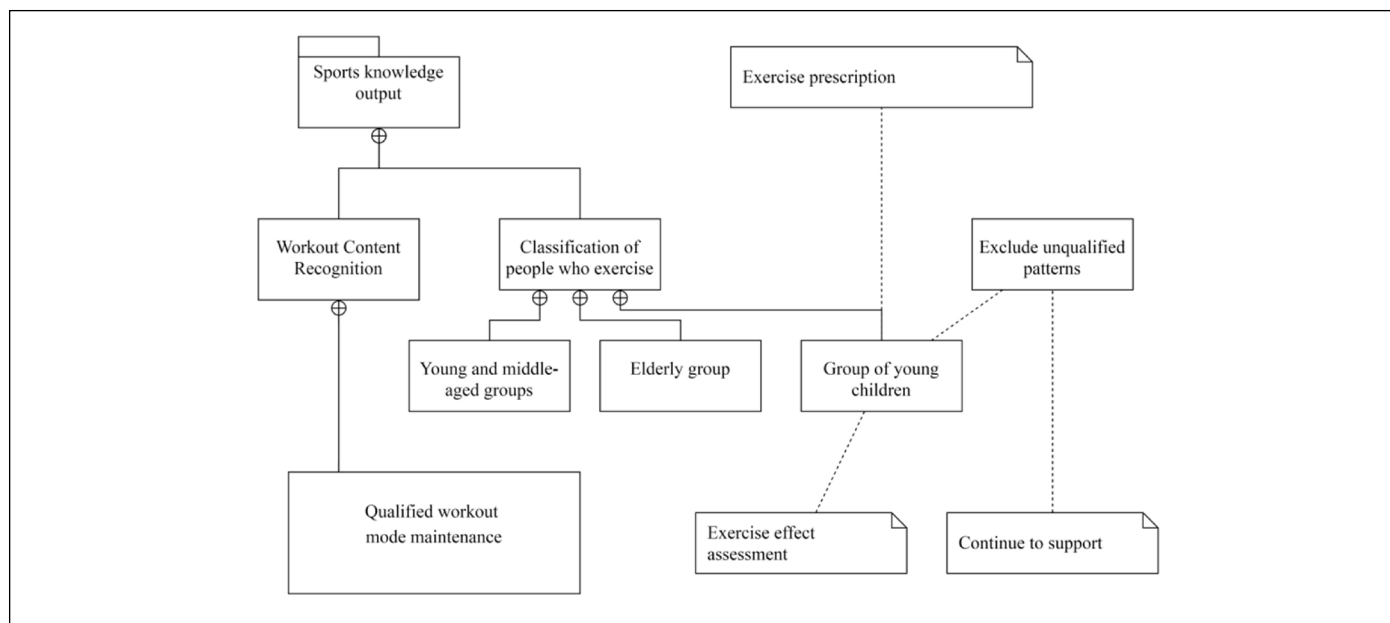


Figure 2. Risk management mechanism under home physical exercise mode during the epidemic period.

discipline and its neighboring disciplines to work together to form a joint force and enhance the interdisciplinary integration based on the sports discipline theory. Strengthen cooperation with medical institutions, integrate all kinds of resources, build a shared activity mechanism from publicity and sports program design, fitness practice and evaluation, and provide resource guarantee for improving

the depth and breadth of sports intervention in epidemic diseases. In order to achieve the grand goal of physical exercise to help promote the construction of a sports power.

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