后疫情时代太极拳与公共健康的作用思考

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摘要：目的：2019 年爆发的新冠疫情，不仅给世界公共健康带来了重大影响，也使人们的生活方式受到了极大影响，例如人们更多的留在家中，尽量减少外出，缺乏锻炼，社交活动减少等。那么如何解决在室内锻炼身体的需求，特别是免疫功能较弱的中老年人的健身需求，成为了当今社会的一个热点话题。另外，随着室内时间的增多，人们的心理健康问题也日益突出。于是，具有身心调节作用的室内运动，现如今逐渐成为大家关注的焦点。随着 2020 年太极拳成功列入世界非物质文化遗产代表作名录，标志着太极拳已成为全人类共同的文化财富，而太极拳对身心健康的有益调节作用，也给了我们提供了一个非常好的室内健身方式。**方法：**文献研究法 归纳分析法。**结果：**一、太极拳对糖尿病的辅助治疗有不错的效果，可能为II型糖尿病的治疗提供一种辅助疗法。内分泌系统疾病是指内分泌腺或内分泌组织本身的分泌功能和（或）结构异常时发生的症候群。II型糖尿病属于典型的内分泌系统疾病，因为多数的糖尿病患者是因为胰岛素分泌不足造成的。胰岛素在身体内能够起到调节血糖的作用，如果机体缺乏这种物质，就会引起糖代谢障碍，从而使患者出现高血糖的症状。糖尿病的患者需要使用药物来辅助降血糖，如果吃药不能达到控制血糖的目的，还需要考虑直接注射人工胰岛素；糖尿病患者饮食上也非常注意，这让患者的身心健康受到了严重的影响。现阶段没有任何证据表明任何强度的运动会加速II型糖尿病进度，反而运动训练可以提高糖尿病患者的身体功能和生活质量，甚至在透析期间也可以进行适当运动，同时注意饮食习惯、生活方式、补充营养。II型糖尿病患者静息时骨骼肌对胰岛素刺激摄取占主导地位，并受到损害，而肌肉收缩则通过一种单独的、附加的机制刺激血糖转运，而不受胰岛素抵抗或II型糖尿病损害。有文献报道，太极拳等有氧运动和阻力训练均有改善胰岛素作用、血糖控制和肌肉脂肪氧化和储存的作用：阻力训练增强骨骼肌质量；太极拳等有氧运动可轻微降低收缩压。因此合适的太极拳能显著改善糖尿病患者血糖和胰岛素之间的调控关系，而有氧运动和阻力运动相结合可能比单独进行能够更有效地改善血糖调控网络关系。另一方面，有文献报道，II型糖尿病患者体力活动的增加和体质的提高可显著减轻患者的抑郁症状，改善患者日常生活的质量。综上所述，太极拳的合理引入，不仅可对糖尿病患者的各项激素调节起到积极作用，更是对患者的身心健康调节

意义重大。二、太极拳对认知功能的改善：太极拳训练加常规锻炼可能是治疗帕金森患者运动和非运动症状的一种理想的非药物替代方法，并且与常规运动方案相比，对于改善帕金森氏病的睡眠质量和认知功能尤其有用。神经退行性疾病 (Neurodegenerative disease) 是一种大脑和脊髓的细胞神经元丧失的疾病状态。大脑和脊髓由神经元组成，神经元有不同的功能，如控制运动，处理感觉信息，并作出决策等等。大脑和脊髓的细胞一般是不会再生的，所以过度的损害可能是毁灭性的，不可逆转的。神经退行性疾病是由神经元或其髓鞘的丧失所致，随着时间的推移而恶化，最终导致功能障碍。长期神经性疾病症状一般分为四种类型：第一类为急性病症：如脊髓损伤、中风和创伤性损伤；第二类为间歇性病症：如癫病、偏头痛等；第三类为进展性病症：如多发性硬化症、重度抑郁症和帕金森病、阿尔茨海默病等；第四类为稳定性病症：没有与年龄相关的退化，如脊髓灰质炎或脑瘫等。在太极拳改善的实验中，使用阿尔茨海默病评估量表 (ADAS-Cog) 和临床痴呆症评级 (CDR) 来评估其对认知功能影响的有效性，结果是参与者在一项或多项认知功能上的平均得分保持或增加，这说明至少太极拳为中老年人预防和改善神经退行性疾病方面可以提供一种有效的选择。三、太极拳对下肢力量的作用显著：有研究表明其作用与不同年龄、性别、身高、体重无显著差异；太极拳干预后功能平衡和肌肉力量得到改善；与传统太极相比，参与者从个性化太极中获益更多，对于预防老年人摔倒颇有益处。太极拳缓慢而直接的运动节奏有助于运动中的节奏控制，以防止在现实生活中跌倒。 适度的太极拳练习可延迟跌倒的发生并改善心血管状况。有实验研究表明，个性化太极拳组参与者的 16 个主要下肢肌肉群的所有功能平衡测试和力量评估均显着改善，比传统太极拳组效果更好。还有研究表明对于社区久坐老人，太极拳是一种合适的、有效的减少跌倒风险的运动方式。**讨论：**即使在没有疫情的情况下，太极拳作为人类的共同财富，已经成为许多人健康生活的运动方式。而随着社会经济的发展，尤其是受疫情的影响，在一些疾病的防治中，如糖尿病、神经退行性疾病，预防老年人摔倒等，太极拳可以发挥极大地作用。人们通过在室内练习太极拳，既可以锻炼身体各部位的平衡能力，协调能力，又可以在打太极的过程中，领会身心合一的美妙结合。总之，太极拳锻炼为我们特别是中老年人提供一种增强免疫力，缓解心理问题的良好选择。通过太极拳的锻炼，能够显著提高个人的精气神韵，使得身体各部位机能更加协调，是身心健康发展的首选室内和室外锻炼方式。

关键词：太极拳；糖尿病；神经退行性疾病；中老年人

Reflections on the role of Tai Chi and public health in the Post-

Epidemic Era

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Abstract: Objective: The COVID-19 epidemic that broke out in 2019 has not only had a significant impact on the world's public health, but also greatly affected people's lifestyles. For example, people stay at home more, minimize going out, lack of exercise, and reduce social activities, and so on. So how to solve the needs of indoor exercise, especially the fitness needs of middle-aged and elderly people with weak immune function, has become a hot topic in today's society. In addition, with the increase of indoor time, people's mental health problems have become increasingly prominent. As a result, indoor sports, which can regulate the body and mind, are now gradually becoming the focus of attention. With the successful inclusion of Tai Chi in the World Intangible Cultural Heritage Masterpiece List in 2020, it indicates that Tai Chi has become the common cultural wealth of all mankind, and the beneficial regulating effect of Tai Chi on physical and mental health also provides us with a very good Way of indoor fitness. **Methods:** Literature research method, inductive analysis method. **Results:** 1. Tai Chi has a good effect on the auxiliary treatment of diabetes, and may provide an auxiliary treatment for the treatment of II diabetes. Endocrine system diseases refer to syndromes that occur when the secretory function and/or structure of the endocrine glands or endocrine tissues themselves are abnormal. II diabetes is a typical endocrine system disease, because most diabetic patients are caused by insufficient insulin secretion. Insulin can play a role in regulating blood sugar in the body. If the body lacks this substance, it will cause glucose metabolism disorders, which will cause the patient to have symptoms of hyperglycemia. Diabetes patients need to use drugs to help lower blood sugar. If the purpose of blood sugar control cannot be achieved by taking medication, they also need to consider direct injection of artificial insulin; diabetic patients also pay great attention to their diet, which seriously affects their physical and mental health. At this stage, there is no evidence that exercise of any intensity will accelerate the progress of II diabetes. On the contrary, exercise training can improve the physical function and quality of life of diabetic patients. Even during dialysis, you can also exercise appropriately, and pay attention to eating habits, lifestyle, and nutrition. In patients with type 2 diabetes, skeletal muscle dominates the uptake of insulin

stimulation at rest and is impaired, while muscle contraction stimulates blood glucose transport through a separate and additional mechanism, without being impaired by insulin resistance or type 2 diabetes. There are reports in the literature that aerobic exercises such as Tai Chi and resistance training can improve insulin action, blood sugar control, and muscle fat oxidation and storage: resistance training enhances skeletal muscle mass; aerobic exercises such as Tai Chi can slightly reduce systolic blood pressure. Therefore, proper Tai Chi can significantly improve the regulatory relationship between blood glucose and insulin in diabetic patients, and the combination of aerobic exercise and resistance exercise may be more effective in improving the blood glucose regulatory network relationship than doing it alone. On the other hand, there are reports in the literature that the increase in physical activity and physical fitness of patients with type 2 diabetes can significantly reduce the symptoms of depression in patients and improve the quality of daily life of patients. In summary, the reasonable introduction of Tai Chi can not only play a positive role in the regulation of various hormones of diabetic patients, but also has great significance in regulating the physical and mental health of patients. 2. Tai Chi improves cognitive function: Tai Chi training plus regular exercise may be an ideal non-drug alternative method for the treatment of sports and non-motor symptoms of Parkinson's patients, and compared with conventional exercise programs, it is useful for improving Parkinson's Sleep quality and cognitive function are particularly useful. Neurodegenerative disease is a disease state in which cells and neurons of the brain and spinal cord are lost. The brain and spinal cord are composed of neurons. Neurons have different functions, such as controlling movement, processing sensory information, and making decisions. The cells of the brain and spinal cord generally do not regenerate, so excessive damage may be devastating and irreversible. Neurodegenerative diseases are caused by the loss of neurons or their myelin sheaths, which deteriorating over time, eventually leading to dysfunction. Symptoms of long-term neurological diseases are generally divided into four types: the first type is acute symptoms: such as spinal cord injury, stroke and traumatic injury; the second type is intermittent symptoms: such as epilepsy, migraine, etc. ; the third type is progress Sexual disorders: such as multiple sclerosis, major depression and Parkinson’s disease, Alzheimer’s disease etc, the fourth category is stability disorders: there is no age-related degeneration, such as polio or Cerebral palsy and so on. In the experiment to improve Tai Chi, the Alzheimer’s Disease

Assessment Scale (ADAS-Cog) and Clinical Dementia Rating (CDR) were used to evaluate the effectiveness of its impact on cognitive function. Or the average scores of multiple cognitive functions are maintained or increased, which shows that at least Tai Chi can provide an effective choice for the prevention and improvement of neurodegenerative diseases in the elderly. 3. Tai Chi has a significant effect on lower limb strength: Studies have shown that its effect is not significantly different from different ages, genders, heights, and weights; functional balance and muscle strength are improved after Tai Chi intervention; compared with traditional Tai Chi, the participants are from personality There are more benefits from personalized Tai Chi, and it is quite beneficial to prevent the elderly from falling. The slow and direct movement rhythm of Tai Chi helps to control the rhythm in movement to prevent falls in real life. Moderate Tai Chi exercises can delay the occurrence of falls and improve cardiovascular conditions. Experimental studies have shown that all functional balance tests and strength assessments of the 16 main lower limb muscle groups of participants in the personalized Tai Chi group have been significantly improved, which is better than the traditional Tai Chi group. Studies have also shown that Tai Chi is a suitable and effective exercise method to reduce the risk of falls for the elderly who sit in the community for a long time. **Discussion:** Even in the absence of an epidemic, Tai Chi, as the common wealth of mankind, has become a way of exercise for many people to live a healthy life. With the development of society and economy, especially affected by the epidemic, Tai Chi can play a great role in the prevention and treatment of some diseases, such as diabetes, neurodegenerative diseases, and prevention of falls in the elderly. By practicing Tai Chi indoors, people can not only exercise the balance and coordination ability of various parts of the body, but also understand the wonderful combination of physical and mental unity in the process of Tai Chi. In short, Tai Chi exercise provides us, especially middle-aged and elderly people, with a good choice for strengthening immunity and alleviating psychological problems. Through Tai Chi exercise, it can significantly improve the spirit and charm of the individual, and make the functions of various parts of the body more coordinated. It is the first choice for indoor and outdoor exercises for the development of physical and mental health.

Key words: Tai Chi, Diabetes, Neurodegenerative diseases, Middle-aged and elderly people