

Original Paper

A Study on the Current Status of Depressive Symptoms and the Application of Physical Exercise Modalities among Community-Dwelling Older Adults

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Received: August 28, 2023

Accepted: October 13, 2023

Online Published: October 20, 2023

doi:10.22158/jpbr.v5n4p48

URL: <http://dx.doi.org/10.22158/jpbr.v5n4p48>

Abstract

As the rate of population aging continues to increase, geriatric depression, as one of the major public health problems in society, has attracted great attention. At present, the development of geriatric sports in China is insufficient, and the overall proportion of elderly people participating in physical exercise is low, especially the proportion of rural elderly people exercising is even lower than that of urban elderly people, all of which is not conducive to the play of the positive effects of physical exercise on the physical and mental health of the elderly. Adopting safe and feasible measures can bring great help to the management of depression among community-dwelling older adults. This paper analyses the current situation of depression among the elderly in community T, describes the physical exercise methods for the elderly with depression in community T, and explores the application effect of physical exercise methods for depression among the elderly in the community in combination with relevant data.

Keywords

elderly, depression, physical exercise

Introduction

According to the latest statistics, the incidence of depression among the elderly in China is increasing year by year and has now reached 10-15 per cent. Depression in the elderly has become a rather serious problem in China, with a great negative impact on both individuals and society. Therefore, it is necessary to strengthen the mental health education of the elderly and improve community medical services. Physical exercise, as an additional means of traditional antidepressant treatment, has a certain role in reducing the risk of recurrence of depression and enhancing patients' confidence in their

medication. This paper takes T community as an example, through the way of questionnaire survey statistics of the community elderly depressive symptoms status, recovered 324 questionnaires, of which the number of valid questionnaires is 286. The author combines and combines the community elderly depression physical exercise way application method, for its practical application effect is analysed.

1. The Current Status of Depressive Symptoms among the Elderly in the Community

From the statistical results of the questionnaire data, it can be found that the detection rate of depression in T community is 25%. Among them, the number of severely depressed elderly accounted for 7.2%, and the number of mildly depressed elderly accounted for 17.8%. The current status of depressive symptoms among the elderly in the community is mainly manifested in the following points: First, depressed mood. Community-dwelling older adults experienced low mood or depression lasting two weeks or more. They felt helpless, lost their sense of interest and pleasure, and lost interest in activities they normally enjoyed; second, sleep problems. Depression is often accompanied by sleep problems, and community-dwelling older adults may experience difficulty falling asleep, waking up early, or experiencing decreased sleep quality; third, dietary changes. Community-dwelling older adults with depression experience changes in eating habits, including loss of appetite or overeating; fourth, decreased physical activity. Depression is often accompanied by a decrease in physical activity, and older adults in the community may become lethargic, lack motivation, and have fewer daily activities; and fifth, attention and memory impairment. Depressive symptoms in community-dwelling older adults may lead to decreased attention and memory, difficulty concentrating, and forgetfulness.

It is important to note that when older people experience these symptoms, they are likely to overlap with other health problems, so it is recommended that family members, social workers or medical staff in the community remain attentive and observant, and recommend help and assistance in a timely manner. If any elderly person develops these symptoms, they are advised to seek medical consultation with a medical professional for a thorough assessment and diagnosis, and to formulate an appropriate treatment plan.

2. Community Elderly Depression Physical Exercise Modality Application Methods

This study carried out an 8-week exercise intervention for community elderly suffering from depressive symptoms, and recorded the daily exercise of the elderly, and divided the patients into multiple groups according to the exercise records.

2.1 The Eighteen Methods of Practicing Gong

The 18 Methods of Practicing Kung Fu is a traditional fitness technique that combines elements of taijiquan, qigong and martial arts. In weeks 1-2, the 18 methods were practiced 3 times/week, and each exercise time was limited to about 30 minutes; in weeks 3-4, the 18 methods were practiced 3 times/week, and the exercise time was extended to 35 minutes; in weeks 5-6, the 18 methods were

practiced 3 times/week, and the exercise time was extended to 40 minutes. The 18 Methods of Practicing Gong combines stretching, expanding and flexing movements, and by stretching the tendons and bones, exercising the muscle strength and improving the flexibility of the body, it promotes blood circulation, improves the coordination and balance of the body, and at the same time, helps to adjust the breathing and reduce the psychological pressure.

2.2 Free Walking Method

Free walking method mainly refers to the relaxing walking exercise in the outdoor natural environment. Free walking method is a simple and effective way to relieve depression symptoms. By relaxing the body and mind, perceiving the surrounding environment, and increasing the amount of exercise, it can regulate the physiological functions of the human body, relieve stress, and enhance the sense of well-being. Older people need to choose a suitable place and time to take a walk, and need to wear clothing suitable for outdoor activities. Before walking, the elderly need to take a deep breath, so that their body and mind can be in a relaxed state, maintain a relaxed gait, with the rhythm of walking, pay attention to the perception of the surrounding natural environment and body sensations. Slowly accelerate the speed of walking and increase the frequency of breathing and heart rate. If the time is too long or the intensity is too high, the recommended time for walking is not more than 1 hour, and long walking time is easy to cause physical discomfort. Elderly people need to walk regularly and freely, and make their own grasp of the exercise time as well as the intensity.

2.3 Baduanjin Qigong

Ba Duan Jin is a traditional fitness gong method, which regulates the physiological functions of the human body through different movements, relieves emotions and promotes mental health. The specific implementation of the eight-duanjin steps are as follows: first, the starting position. Feet together, arms naturally hanging down, body relaxation, breathing steadily; second, kneading waist clenched fist. Hands into fists, gently rubbing both sides of the waist, several times, and then slowly upward clenched fists, and then slowly loosened; Third, the Golden Rooster Stand Alone. Feet apart and shoulder width, left knee bent, right foot straight, hands palm down on the knee, hold 2-3 seconds and then change to the other side; fourth, lunge Totian Li Sanjiao. Take a big step forward with the right foot, bend the right knee and land on the back of the left foot. Breathe in with your left hand up, breathe out with your right hand pressing down, and switch to the other side when you're done; fifth, wrap your knees around. Knees slightly bent, thumbs don't in the coils, first left after the right, hands and elbows as close as possible, to relieve the pressure on the back; sixth, lying silkworms fluctuation: hands naturally drooping, and then gently lift the arms up, up to lift, pay attention to do not too much force, to avoid shoulder injuries; seventh, inverted to catch the tiger: feet and shoulder width, two arms naturally drooping, push forward, while the back upward. This action can strengthen the strength of the waist muscles; eighth, the closing trend: the last return to the original position, two arms naturally hanging down, keep calm breathing.

The advantages of Ba Duan Jin are that the movements are simple, easy to learn and can be practiced anywhere. By practicing Baduanjin, you can improve all aspects of your body, such as flexibility, coordination, strength, etc. It can also relieve symptoms of depression and improve your mental health. Note that if you are a beginner, it is recommended to practice under professional guidance to gradually familiarize yourself with the movements and master the correct posture.

3. Effects of Applying Physical Exercise Modalities for Depression in Community-Dwelling Older Adults

Depression is one of the common psychological disorders in the elderly, and physical exercise has been shown to have a positive effect on improving depressive symptoms. By studying different physical exercise modalities, we can find the best way to prevent and treat depression in the elderly, and provide scientific interventions for the community to reduce depressive symptoms in the elderly.

3.1 Adjusting Cognitive Function in Older Adults

Depression is a common mental disorder disease, and older adults are more likely to experience symptoms of depression due to factors such as deterioration of physical and cognitive functions and changes in social relationships. Physical exercise, as a non-pharmacological intervention, has great value in assisting the treatment of depression.

Through the results of the questionnaire survey we were able to find that the elderly are able to effectively adjust their own cognitive functions after going through physical exercise, and that depressed patients often show problems such as inattention and slow thinking. Firstly, physical exercise can increase blood flow and oxygen supply, promote the normal function of the brain, and thus improve attention and concentration; secondly, patients with depression are often accompanied by the problem of memory loss, and physical exercise can stimulate the growth and functional improvement of the hippocampus, strengthen the connection between neurons, and improve memory and learning ability; thirdly, physical exercise can release a large amount of endorphins and dopamine and other chemicals, which play a role in regulating mood and stress in the brain. Through physical exercise, elderly patients with depression can better manage their emotions and reduce anxiety and tension; fourth, it promotes social interaction and cognitive stimulation: participating in physical exercise activities can increase opportunities for social interaction and broaden social circles. Physical activity also provides cognitive stimulation, such as learning new motor skills and rules, and enhancing cognitive function. This is largely due to the effects of physical activity on the nervous and cardiovascular systems. Some studies have shown that moderate physical activity improves cerebral haemodynamics in older people and can facilitate the synthesis and release of brain components and increase synaptic plasticity, thus benefiting cognitive function, as well as improving the function of the cardiovascular system and reducing psychological stress.

In the community, providing older people with opportunities and support for physical activity can promote their physical and mental health, alleviate depressive symptoms, and improve socialization and quality of life. For example, organizing physical exercise activities such as outdoor walks, tai chi, practicing the 18 methods of kung fu and ball games for the elderly can help them relieve stress in their lives, improve communication and exchanges among them in the community, and enhance their sense of well-being. It should be noted that the physical condition of the elderly varies, so it is necessary to formulate a suitable exercise programme according to individual conditions and under the guidance of professionals when carrying out physical exercise. Therefore, when carrying out physical exercise, the physical condition and ability of the elderly should be taken into account, suitable exercise programmes should be selected, and reasonable arrangements and management should be made under the guidance of professionals in the community.

3.2 Improvement of Depression in the Elderly

Physical exercise is effective in improving the depressive condition of older people with community depression. The following are some of the effects of physical exercise on the improvement of the depressive condition of the elderly: firstly, releasing the pressure within the body. Physical exercise helps to release the accumulated stress and tension within the body and enhances pleasure and mood. Exercise promotes the secretion of neurotransmitters such as dopamine and endorphins within the brain, resulting in positive emotions and a sense of well-being; secondly, it enhances the mental state. Physical exercise helps to distract attention and shift the focus of thinking, helping older people get rid of negative emotions and depression. Participation in physical activities can make the elderly feel the warmth and support of community groups, increase social interaction, and enhance self-esteem and sense of belonging; third, improve sleep quality. Depression is often accompanied by sleep problems, and physical exercise can adjust the biological clock of the elderly and improve sleep quality. Exercise consumes energy and fatigues the body, making it easier for older people to fall asleep and improving sleep effects, thus reducing depressive symptoms; fourth, promoting physical health. Physical exercise is beneficial to the physical health of the elderly, which can improve overall physical fitness and immunity, reduce the risk of other diseases and increase resistance. Improved physical health will bring more self-confidence and a positive mindset to the elderly, which will help reduce depressive moods.

In the community, organizing suitable exercise activities is very important for the improvement of depressive conditions in older people. Light exercises such as walking, tai chi, yoga and swimming can be organized. These low-intensity exercises not only reduce the difficulty and risk of exercise, but also make them more acceptable and adherent to the elderly. Providing community support and encouragement, establishing a friendly environment for exercise, and providing opportunities for older people to communicate and help each other are also important factors in helping them improve their depressive conditions. It should be noted that the physical condition and health status of each older person may vary, so they should consult their doctors or professionals for advice on an individual basis

before engaging in physical exercise and choose the type and intensity of exercise that suits them.

3.3 Enhancing the Effect of Antidepressant Use

Through the investigation of elderly patients with depression can be found, the author in the research process will be physical exercise and drug treatment of these two treatment modalities compared, found that physical exercise has a similar antidepressant and quality of life improvement effect. If the elderly in the community can add the combination of physical exercise on the basis of drug treatment, compared with the use of drugs alone, the former is more able to improve the patient's emotional state and quality of life.

Physical activity can enhance the effect of antidepressant medication in older adults. Based on the results of the questionnaire survey, the authors found that a number of studies have shown that physical activity can have a positive impact on depressive symptoms in older adults, and that physical activity can have a similar or better antidepressant effect compared with antidepressant medication. Both physical activity and antidepressant medication can increase the secretion of neurotransmitters such as dopamine in the brain, thereby improving mood states. Moreover, they have different mechanisms of action and can complement each other when used together to treat depression more effectively.

Physical exercise can also help older people shape a healthy lifestyle, enhance self-confidence and self-efficacy, improve physical immunity and mental toughness, and reduce or prevent recurrence of depression. In conclusion, for older adults with depression in the community, physical activity and antidepressant medication in parallel may be a more desirable option. However, it should be reminded that older adults need to pay attention to safety and moderation when engaging in physical exercise, choose the type and intensity of exercise that suits them, and adjust it according to their personal situation. The use of depressant medication alongside physical exercise for older people in the community can play a complementary role in relieving and improving depressive symptoms more effectively, as well as shaping a healthy lifestyle and improving physical and mental health. Specific treatment plans still need to be developed by patients for their own individual circumstances and implemented under the guidance of professionals.

Conclusion

In conclusion, conducting a study on physical activity modalities for depression among community-dwelling older adults is of great significance for improving the mental health of older adults, enhancing quality of life, and conserving social resources. This will provide scientific intervention strategies for depression in the community and provide guidance and support for promoting health promotion and disease prevention among older adults. Depression is often accompanied by physical health problems and social isolation among older adults, among other factors, affecting their quality of life. By examining physical activity modalities, we can provide suitable exercise projects and programmes for older people to help them actively participate in community

activities, increase exercise communication, and enhance their self-confidence and sense of belonging, thereby improving their quality of life. The community also needs to recruit good community support networks and professional guidance are both important factors in implementing physical activity programmes for depression, preferably under the guidance of a doctor or health professional, and adjusted and optimized based on individual feedback and outcomes.

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