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The influence of aerobic dance on negative mood population and the social service mechanism

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ABSTRACT
The purpose of this study is to investigate the effect of aerobic dance on negative mood people and analyze its social service mechanism. Through comparative experiments, it is found that aerobic dance has a significant positive impact on negative mood people, which can improve their emotional state and improve their quality of life. At the same time, this study also discusses the application mechanism of aerobic dance in social services, which is a certain reference for related social services.

KEYWORDS
aerobic dance; negative emotion and social service mechanism

With the rapid development of social economy, bring people more employment opportunities and a higher standard of living, but also brought greater competition pressure, lead to negative emotional problems are increasingly common in the crowd, such as anxiety, depression, fear, pain, sadness, etc., these problems not only affect personal physical and mental health, but also may have a negative impact on social stability. Therefore, exploring effective intervention means to alleviate negative emotions has become an important topic in the current field of social services. Aerobic dance, as a dynamic way of exercise, has been proved by more and more studies that it has a significant improvement effect on the mood [1], and can effectively improve the level of happy factor, pride factor and hope factor [1-2]. The aim of this study was to investigate the effect of aerobic dance in negative mood populations and analyze its social service mechanisms to provide a reference for related social services.

1 Data and methods

1.1 General information

100 depressed patients admitted to local psychiatric hospitals from September 2022 to August 2024 were selected as the study subjects. Inclusion criteria: meet the national diagnosis criteria of Mental and Behavior Disorders (ICD-10); aged 18-65 years old; above junior middle school education, voluntarily participate in aerobic dance intervention, and gave informed consent and signed informed consent. Exclusion criteria: people with severe physical illness, depression patients with psychotic symptoms, language communication disorders and low intelligence. Subjects were divided into observation and control groups by random random. In the observation group, 14 male and 36 female, mean age (40.12 ± 14.02); education: 16 in junior high school, 13 in high school, 21 in college and above; marriage: 9 unmarried, 39 married, and 1 divorced and widowed. In the control group, 23 male and 27 female, mean age (39.34 ± 14.15); educational level: 12 middle school, 15

high school, 23 college and above; marriage: 8 unmarried, 38 married, 4 divorced and widowed. There were no significant differences in gender, age, educational background, or marital status (P> 0.05) and none in the Hamilton Depression Scale (HAAMD) scores (P> 0.05).

1.2 Method

The control group was treated with conventional antidepressant medication and psychotherapy and health knowledge lectures. The observation group adopted aerobic dance intervention on the basis of the control group. The aerobic dance intervention included folk dance, group dance, fitness dance, and ballroom dance (such as slow three, slow four). The specific intervention will be 6 months, from 16:00-17:00 PM; 9:00-10:00 am in group activities. The patients in the observation group were divided into 2 groups, with 25 patients in 3 rows. Each treatment lasted 45 minutes in the room of 120 square meters on the second floor of the gym of the hospital.

1.2.1 Cultivate

Clinical mood doctors of the hospital and doctors with the qualification of psychological therapists gave relevant knowledge lecture training on aerobic dance therapy and the research status at home and abroad. Clinical psychologists were invited to evaluate the two scales involved in this study.

1.2.2 Intervention process

(1) Start: the implementer will uniformly explain the matters needing attention; Warm-up for 5min, To reach the target heart rate, Start the 40-min countdown immediately, A total of 45min, Using 70% -85% of the maximum heart rate (220-age); (2) Intervention: if the patient has dyspnea, dizziness, nausea, expression pain and other conditions, Stop the intervention immediately, Continue only after rest if the body allows; (3) End: Conduct stretching-based relaxation activities, Is able to relax the mood and improve muscle elasticity, Then lead the patient to adjust the body, mind and breathing; Before the end of the event, The implementer makes a summary, Let people find their own emotional changes and movement characteristics in the activity, Summarize your emotions and your body, Support and encouragement for each patient participation, Time of 10min.

1.2.3 Psychotherapy

Both groups had cognitive function testing in a quiet room during the day, measured by two trained professionals. First, patients need to have some desire for treatment; second, professionals should establish a good relationship of mutual understanding, respect and support with patients. The establishment of a good relationship is a determinant of psychotherapy success. Psychological therapies include supportive psychotherapy, cognitive-behavioral therapy, and family and marriage therapy. The main thing is to let patients understand the existence of negative cognition and in the face of problems, problem solving, the application of inappropriate coping methods. In addition, patients also need to explore the suppressed contradictions and conflicts in the subconscious mind. Because patients often have an immature psychological defense mechanism, that is, psychological activities, let patients to know, can help patients to correct their own habits.

1.3 Observing indicators

(1) Depression self-rating scale (SDS): compiled by Chung in 1965, 20 items, this scale has 1-4

grades. The higher the score, the more serious the depression.(2) Anxiety Self-evaluation Scale (SAS): compiled by Chung in 1971, this scale contains 20 items. Each item mainly evaluates the frequency of symptoms according to the feeling of the latest week, grade 1-4. The higher the standard score, the more serious the anxiety symptoms.

1.4 Statistical methods

Measurement data were expressed as mean ± standard deviation ($x \pm s$), t-test with independent samples, test level $\alpha = 0.05$, and $P < 0.05$ was statistically significant.

2 Results

2.1 Comparison of SDS and SAS scores before and after treatment in the two groups

Before treatment, there was no significant difference in SDS and SAS total scores between the two groups ($P > 0.05$). After 6 months of aerobic dancing intervention, the total SDS and SAS scores of patients in the observation group decreased compared with those before treatment, and the difference was very significant ($P < 0.01$). The control group had lower scores of negative emotions before and after the intervention, with significant difference ($P < 0.05$), but in the absence of aerobic dance intervention, the changes in negative mood were not significant in the observed group.

2.2 Social service mechanisms of aerobic dance

2.2.1 Physiological effects and social service mechanism of aerobic dance

(1) Aerobic dance, as an aerobic exercise, can significantly improve the individual's cardiopulmonary function, enhance muscle strength and flexibility, and improve the coordination and balance of the body. These physiological effects contribute to reducing the occurrence of chronic diseases and improving the quality of life. By participating in aerobic dance, individuals can form a positive lifestyle, including a reasonable diet, regular work and rest, so as to further promote physical health. (2) At community level, aerobic dance can be used as an important part of fitness activities, providing convenient ways for residents to exercise. At the same time, medical institutions can also use aerobic dance as a means of rehabilitation to help patients restore their physical functions. (3) Aerobic dance can release inner pressure and negative emotions, and improve personal emotional stability. By participating in dance activities, individuals can feel pleasure and a sense of achievement, thus enhancing self development and happiness. (4) Aerobic dance, as a collective activity, requires individuals to interact and cooperate with others. This helps to cultivate individual social skills and team spirit and enhance social adaptability.

2.2.2 Social effects and social service mechanisms of aerobic dance

(1) As a cultural phenomenon, aerobic dance can enrich community cultural life and improve the community cultural taste. By holding aerobic dance competitions, performances and other activities, the enthusiasm of community residents can be stimulated and community cohesion can be enhanced. (2) The development of the aerobic dance industry can drive the development of relevant industrial chains, including dance training, music production, fashion design, etc. This helps increase employment opportunities and promote economic development. (3) The Government and social organizations can use aerobic dance as a means of community service to provide diversified cultural and recreational activities for the residents.

3 Discussions

With the rapid development of society, individuals's pressure is increasing and negative emotional issues are increasingly prominent among the population. These issues not only affect the physical and mental health of people, but also cause a heavy burden on the family and society, and also pose a possible threat to social stability and development. Patients with negative emotions generally lack a positive mentality [4], usually through drugs and psychological therapy, but it has been shown that receiving medication and psychological therapy alone cannot achieve satisfactory results. And aerobic dance therapy, not only to vent emotions, but also can recognize their own difficulties [5-6]. Through physical activity, it can help patients to find the physical expression way, stimulate the hidden psychological problems and help patients to form a good behavior pattern and effectively improve the negative mood of depression and anxiety.

Aerobic dance therapy through creative and action narrative the innovative psychological treatment, through the way of verbal patients difficult to express the pain, will the body and mind integration, spontaneous and impromptu action to express negative emotions [7], will release patients with deep anxiety, depression, to improve self-efficacy played a positive role. The results of this experiment showed that the negative mood significantly decreased and the positive mood was significantly increased in the observation group after receiving the aerobic dance intervention. This suggests a significant positive effect of aerobic dance on the negative mood . Aerobic dance as a form of social service has multiple mechanisms such as providing emotional support, promoting physical health and improving the quality of life. Therefore, it is suggested that the aerobic dance intervention should be widely used in social services to provide more support and help to the negative mid population. At the same time, we should strengthen the publicity and promotion of aerobic dance, improve public awareness and acceptance, in order to promote its wide application in social services, to contribute to the construction of a harmonious society [8].

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