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Comparative Study in the Influence of 20-week Traditional Health Program on Some Physical Indicators of Drug Rehabilitation Personnel

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Abstract: In this study, 99 drug rehabilitators were screened for 20-week traditional physical exercise programs with reference to the National Physical Fitness Standard Manual (adult) , some of the physical indexes of the exercise rehabilitation personnel have produced some good changes, effectively reducing the BMI value and the quiet rhythm, improving the vital capacity, muscle strength, endurance and explosive strength, and increasing the balance ability, but it doesn't have much effect on speed. The patient level of drug rehabilitation patients has been improved, and the sense of anxiety has been significantly reduced. This has a significant effect on promoting the progress of the course, increasing the learning and exercise time of traditional Chinese health preservation projects, in order to better improve their physical and mental health and restore normal production and life as soon as possible.

1. Study Subjects and Methods

1.1. Study Subjects

Table 1: Subject screening conditions.

content	standard
age	20-59
Inappropriate participants were excluded	People with respiratory system and cardiovascular diseases; Contraindication to exercise or the inability to exercise normally; Emotional instability and psychological exclusion due to psychological factors; Those who really quit with irresistible factors during the experiment;

Of Kunming a man rehab in quit rehabilitation personnel screening, select suitable for participating in the test study, on the basis of the national constitution measurement standard manual (adults) standard, age control for 20-59 years old, clinical medical examination excluding respiratory system, cardiovascular disease, excluded with exercise contraindications or not normal exercise

patients, excluding emotional instability, psychological exclusion patients, excluding irresistible factors during the experiment [1], total screening object 108, after 20 weeks of training, quit nine, so the overall number of subjects is 99. The test object standards are shown in Table 1.

1.2. Study Methods

1.2.1. Experimental Method

Referring to "Drug Rehabilitation Traditional Health Sports Training Textbook" , according to the martial arts health items in the traditional Chinese health program, the content includes one-minute health care, relaxation, Baduanjin, jin, six-character formula, Yi Jin Jing, Wuqinxi, etc [2], training twice a week, 2 hours each time, according to the teaching content of the health project comprehensive training [3].

1.2.2. Test Indicators

The standards in the manual of national physical measurement standards (adult part) are checked and revised [4].Table 2 shows the specific testing standards.

Table 2: Test indicators.

class	The original test standard	testing standard
form	height and weight	height and weight
function	Spirometry step test	Spirometry for 1 min of quiet heart rate
quality	the power of gripping	the power of gripping
	push-up	push-up
	Sit forward	Sit forward
	Stand on one foot with your eyes closed	Stand on one foot with your eyes closed
	choice reaction time	standing long jump
	vertical jump	50 Meters [5]

1.2.3. Data Processing

The SPSS 23.0 statistical analysis software was used to analyze the before and post data comparison of the research subjects.

2. Experimental Results

2.1. Change in BMI Value

Table 3: Comparison of BMI values (n=99).

metric	stature		weight		BMI	
	Pre-experimental measurement	Experimental post-test	Pre-experimental measurement	Experimental post-test	Pre-experimental measurement	Experimental post-test
median	169	169	67	65.1	22.6	23
least value	150	150	50	40.5	17	18
crest value	190	190	94	97.5	35	27

BMI (Body Mass Index), or body mass index, is an important measure of standard body weight. BMI is used to determine whether the body is overweight or lean [6]. As can be seen from Table 3, after 20 weeks of traditional health program exercise, the BMI value of rehabilitation personnel

changed significantly (through the test, P=0.045 <0.05). The BMI value of rehabilitation personnel was more dispersed before exercise, with a minimum value of 17 and a maximum value of 35. After exercise, the BMI value of rehabilitation personnel was closer to the BMI value range of healthy adult men (18.5-23.9).

2.2. Analysis of Spirometry Index Changes

Pulmonary living capacity is closely related to human respiration, and the organs, systems, tissues and cells of all parts of the human body consume oxygen all the time. Therefore, only in the case of normal breathing can we meet the normal working needs of the body [7]. Lung capacity of healthy adult men is 3500~4000ml, but taking drugs can seriously affect the lung function, from Table 4, it can be seen that, through the test results, the minimum of 1200, the median and mean levels of average, the median and the average of the healthy adult men, the improvement is significant (by SPSS test, P=0.00 <0.05).

Table 4: Pirometry changes (n=99).

metric	Pre-experimental measurement	Experimental post-test
average value	2755.45	3601.7
The median grouping	2800	3535
least value	1200	2800
crest value	4500	4596

2.3. Analysis of Quiet Heart Rate Index in 1 Minutes

Quiet heart rhythm in adults is generally 60~100 times / minute, but due to various factors, it will lead to sinus rhythm bradycardia or tachycardia [8], causing harm to the body. From Table 5, it can be seen that. According to the detection of rehabilitation personnel before the experiment, it was found that the heart rate value was relatively scattered and high, and the highest value reached 107, seriously exceeding the range of normal heart rate value, and the minimum value was 50. Through exercise, this index was improved and produced significant changes (P=0.00 <0.05), the maximum value was reduced to 85 times / minute, and the minimum value still existed after exercise. There are two possible reasons: this, first, the heart rate of the elderly was relatively slow, which was normal; second, meditation during exercise reduced the quiet heart rate [9].

Table 5: 1 min Changes in quiet rhythm index (n=99).

metric	Pre-experimental measurement	Experimental post-test
average value	77.323	66.566
The median grouping	75.833	64.5
least value	50	50
crest value	107	85

2.4. Changes in Muscle Strength and Muscle Endurance Indicators

To test the indicators of muscle strength and muscle endurance, the grip strength and push-ups are used in the National Physical Fitness Measurement Standard manual (for adults).

According to Table 6.Muscle strength level, tested using grip strength indicators. The normal standard of grip strength in adult men was 43-50 Kg, but in the pre-experiment test, the mean and median of the index were significantly smaller than the minimum value of the normal index. Through training, this index changed significantly (P=0.003 <0.05), and the minimum value of the index also reached more than 28 Kg.

At the muscle endurance level, a push-up test was used, that is, the number of continuous push-ups was not timed. In the national Physical Fitness Measurement standard manual (for adults), the three scores were the lowest. As can be seen from Table 6, the number was less than 3 both before and after exercise, but the index still changed significantly (P=0.00 <0.05). In terms of mean and median, about 10 times increased.

Table 6: Changes in muscle strength and muscle endurance indicators (n=99).

metric	the power of gripping (Kg)		Push-ups (one)	
	Pre-experimental measurement	Experimental post-test	Pre-experimental measurement	Experimental post-test
average value	41.4	47.0	25.1	34.5
The median grouping	42	46.77	21.5	36.5
least value	18	28.12	0	1
crest value	66	69.39	60	65

2.5. Balance Ability Index Test

This index was tested by the single-leg eye-closed standing item.

Many of the traditional health care projects of the Chinese nation attach great importance to physical balance ability and flexibility ability [10]. After 20 weeks of traditional health care project exercise, these two indicators have changed significantly (P=0.00 <0.05; P=0.00 <0.05). After testing in Table 7, it was found that. The mean value of balance ability changed from 4.5 before exercise to 10.7 after exercise, and the mean value of sitting forward flexion increased from 0.5 to 14.6, with significant improvement.

Table 7: Changes in balance and flexibility indicators (n=99).

metric	Stand on one leg with your eyes closed (s)		Sitting body anterior flexion (cm)	
	Pre-experimental measurement	Experimental post-test	Pre-experimental measurement	Experimental post-test
average value	4.4842	10.6587	0.49	14.62
The median grouping	3.8261	11.22	0.94	12.09
least value	0	1	-5	-1
crest value	19	19.82	33	34

2.6. Change of Explosive Force Index

Table 8: Changes in explosive power indicators (n=99).

metric	Pre-experimental measurement	Experimental post-test
average value	157.2	176.5
The median grouping	154.6	174.0
least value	102	124.03
crest value	222	228.23

The test of explosive power was conducted by the standing long jump project. After exercise, it was found that there was also a significant change in explosive force (P=0.00 <0.05). After the test in Table 7, it was found that Table 8 shows the comparison before and after the test, the average score increased by 20cm, and the lowest score was also increased from 102cm to 124cm, with significant changes.

2.7. Change in Speed Index

According to Table 9, the speed index used the 50-meter run test, and it was found that there was no significant change in this index (P=0.141> 0.05). By comparing the data, it was found that only the slowest speed decreased from 20s to 16s, and there was no big change. The reason for this result may be that in the exercise, there is no more intense exercise, which is mainly slow heart movement, which has no great impact on the speed ability.

Table 9: Changes in speed index (n=99).

metric	Pre-experimental measurement	Experimental post-test
average value	12.9327	12.2965
The median grouping	12.4706	12.57
least value	8	8.06
crest value	20	15.97

3. Conclusion

Through 20 weeks of traditional health project study and exercise, for 99 drug rehabilitation personnel part of the body index has produced some good changes, effectively reduce the BMI value and quiet rhythm, improve the lung capacity, muscle strength and endurance and explosive force, increase the balance ability, but did not have a greater impact on speed ability.

Thus shows that the Chinese traditional health project can effectively improve health, improve the quality of life, for drug rehabilitation personnel to restore normal production life ability has a good effect, at the same time in the process of daily exercise, teaching staff obviously found that rehabilitation personnel learning patience improved, anxiety, to promote the course schedule has obvious effect, so through the experimental results, drug rehabilitation personnel can increase the Chinese traditional health project learning and exercise time, in order to better improve physical and mental health, return to normal production life as soon as possible.

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