

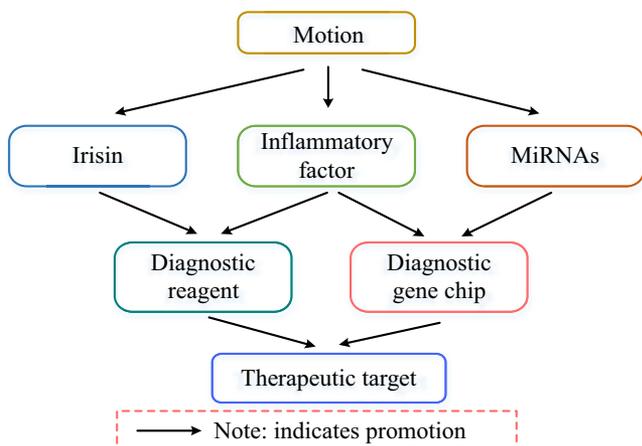
no intervention treatment was used. The three groups of experiments were performed with the same exercise intensity, exercise frequency, and exercise volume. Then record and sort out the main neurobiological mechanisms such as nerve cells and neurotransmitters that have changed during the treatment of depression. The experiment lasted for 12 weeks. In addition, the experiment used literature, observation and other experimental methods to collate and analyze data information.

**Results.** The study found that exercise combined with theoretical mechanics teaching has the best performance effect in treating students' depression. The intervention intensity is usually 50% - 85% of the maximum heart rate, and the recommended exercise frequency is 3-5 times/week. The neurobiological mechanism of exercise intervention on students' depression based on theoretical mechanics teaching is shown in Figure 1 below.

As shown by the arrow in Figure 1, it has a promoting effect. According to research, the neurobiological mechanism of exercise combined with theoretical mechanics teaching in the treatment of depression is mainly manifested in regulating cytokine production, mediating microRNA expression, increasing neurotransmitter release, maintaining mitochondrial function, and reducing apoptosis of hippocampal neurons.

**Conclusions.** This study verified that exercise intervention combined with theoretical mechanical therapy has a certain relieving effect on students' depression. At the same time, it was found in this treatment process that the neurobiological mechanism of exercise combined with theoretical mechanics in the intervention of depression was mainly to regulate the expression of cytokines and mediating microRNA, release of neurotransmitters, inhibit the inflammatory pathway, maintain the mitochondrial function, and reduce the apoptosis of hippocampal neurons.

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**Figure 1.** Neurobiological mechanism of exercise intervention on students' depression based on theoretical mechanics teaching

## Research on the effect of predictive nursing combined with psychological education on students with mania

Qifei Zhang<sup>1</sup> and Aikebaier Yasen<sup>2\*</sup>

<sup>1</sup>Nantong Health College of Jiangsu Province, Nantong 226000, China and

<sup>2</sup>Kizilsu Vocational Technical College, Kizilsu Kergez Prefecture 845350, China

\*Corresponding author.

**Background.** Mania is a common psychological disease, which is often treated with drugs in clinical practice, but the effect of conventional nursing intervention is not significant. Therefore, this study tries to intervene manic students through predictive nursing and psychological education.

**Subjects and Methods.** From March 2020 to March 2021, 116 manic students who entered our hospital for treatment were selected as research subjects. They were randomly divided into a routine intervention group and a joint intervention group, each containing 58 manic students. The routine intervention group was given routine nursing care in the psychiatric department of our hospital. The joint intervention group was intervened through predictive nursing and psychological education. The intervention effect was evaluated by the Bech Rafaelsdn Mania Rating Scale (BRMS) and the Global Assessment Scale (GAS).

**Results.** Before the intervention, there was no significant difference in BRMS and GAS scores between the two groups ( $P > 0.01$ ). After the intervention, the BRMS score of the joint intervention group was significantly lower than that of the control group, and the GAS score was significantly higher than that of the control group, and the difference was statistically significant ( $P < 0.01$ ).

Table 1 shows the comparison of BRMS and GAS scores between the two groups of manic students before and after the intervention.

**Conclusions.** This study proved that the intervention effect of predictive nursing combined with psychological education on manic students was significant. This therapy can effectively reduce the onset of mania and improve the treatment compliance of patients by changing students' psychological cognition. This study is of great significance to the psychological intervention of manic students.

**Table 1.** Comparison of BRMS and GAS scores before and after intervention

Group	BRMS/score		GAS/score	
	Before intervention	After intervention	Before intervention	After intervention
Routine intervention group	19.43±2.41	8.17±2.42*	22.62±5.43	81.23±14.81*
Joint intervention group	19.51±2.52	14.51±3.41*	22.84±5.38	52.56±11.12*
<i>P</i>	>0.01	<0.01	>0.01	<0.01

Compared with before intervention, \* $P < 0.01$ .