result, people pay more and more attention to non-drug treatment in psychiatry. For example, the role of music, art, and behavioral therapy in helping patients in the process of mental rehabilitation. It is hoped that patients can improve their cognitive and social functions while adhering to medication, so as to better promote patients' return to society.

**Table 1.** Comparison of clinical symptom improvement effect between the two groups before and after treatment (n/%).

<table>
<thead>
<tr>
<th>Group</th>
<th>Emotional indifference</th>
<th>Poverty of thought</th>
<th>Will decline</th>
<th>Attention disorders</th>
<th>Sleep disorders</th>
<th>Hallucinatory delusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study group</td>
<td>62/86.11</td>
<td>59/75.64</td>
<td>48/66.67</td>
<td>56/71.79</td>
<td>67/85.90</td>
<td>22/28.21</td>
</tr>
<tr>
<td>Control group</td>
<td>42/53.85</td>
<td>39/50</td>
<td>36/46.15</td>
<td>39/50</td>
<td>47/60.26</td>
<td>15/19.23</td>
</tr>
<tr>
<td>(X^2)</td>
<td>6.514</td>
<td>5.741</td>
<td>7.482</td>
<td>8.175</td>
<td>1.18</td>
<td>1.038</td>
</tr>
<tr>
<td>(P)</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&gt;0.05</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

* * * * *

### THE INFLUENCE OF MODERN ART THERAPY ON STABILIZING THE MOOD OF PATIENTS WITH MENTAL ILLNESS

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**Background:** Art therapy is an interdisciplinary professional field that emerged and is developing in Europe and America after World War II. It is based on multidisciplinary theories such as psychology, art, sociology, and philosophy, and emphasizes that visual symbols and images are the most natural of human experience. The form of communication tries to achieve the purpose of treatment by allowing the client and professional art therapists to conduct various artistic creation activities such as painting and sculpture on the premise of establishing a certain trust relationship, and to carry out multi-dimensional interactive activities around the work. However, how to define art therapy comprehensively and precisely is still controversial in the art therapy field.

As a widely used form of psychotherapy, the theoretical basis of art therapy comes from Sperry’s theory of division of labor between the left and right brain and the theory of mental projection. The main theoretical basis of modern art therapy is the psychological projection in analytical psychology. The theory believes that psychological projection is a reflection of free will in the individual’s consciousness, which is an active and unconscious performance activity. The products of different psychological projections not only exist in the form of artistic creation, but human dreams, hallucinations and even delusions can all be regarded as manifestations of psychological projections. Therefore, artistic creation activities can be applied as a technique of mental projection, which can effectively stabilize the mood of patients with mental illness.

**Objective:** As a psychological phenomenon, emotions play an important role in the daily life of individuals. Since the category of emotions is multi-level, any one of them can be the object of individual adjustment, so stabilizing the emotions of patients with mental illness is also a complex and diverse process. Modern art therapy has the effect of relieving emotions and stabilizing mood. Therefore, the emotions of patients with mental illness can be controlled through modern art therapy.

**Subjects and methods:** Selected 3505 patients with mental illness admitted from 2010 to 2020, including 2500 males and 1005 females; the oldest is 69 years old, the youngest is 16 years old, and the average age is 42.5 years old. Education level: 1000 cases of high school and above, 1065 cases of junior high school, 1085 cases of elementary school, 355 cases of illiteracy. Types of diseases: 1680 cases of schizophrenia, 205 cases of paranoid psychosis, 836 cases of mood disorders, 362 cases of reactive psychosis, 366 cases of schizophrenia psychosis, and 56 cases of anxiety. Course of disease: The longest is 12 months, the shortest is 45 days, and the average is 40.5 days. Living environment: 1605 cases in urban areas and 1,900 cases in rural areas. Randomly divided into 1642 cases of art therapy group and 1863 cases of non-art therapy group.

**Study design:** (1) Before the experiment, test the emotional stability of the experimental group and the control group respectively;

(2) Start the experiment and give art therapy to the experimental group, while the control group does...
not have any art therapy;

(3) Twelve months after the implementation of the experiment, conduct the second emotional stability test to learn again about the emotional stability of the experimental group and the control group for patients with mental illness;

(4) Compare the data before and after the experiment, and analyze the differences between the subjects before and after the experiment.

**Methods of statistical analysis:** The SPSS software was used to count and analyze the original data of the two tests to test the changes in emotional control of the experimental group and the control group before and after the experiment.

**Results:** To compare the cure difference of mental illness patients between the experimental group and the control group before and after the experiment, the experimental results are shown in Table 1.

**Table 1.** Comparison of the cure rate of the two groups of patients.

<table>
<thead>
<tr>
<th>Group</th>
<th>Cure</th>
<th>Not cured</th>
<th>Total</th>
<th>Cure rate/%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test group</td>
<td>937</td>
<td>705</td>
<td>1642</td>
<td>57.06</td>
</tr>
<tr>
<td>Control group</td>
<td>915</td>
<td>948</td>
<td>1863</td>
<td>49.10</td>
</tr>
<tr>
<td>Total</td>
<td>1852</td>
<td>1653</td>
<td>3505</td>
<td>52.08</td>
</tr>
</tbody>
</table>

The mental illness patients in the experimental group have a higher cure rate, and their emotions have been relieved. Through modern art therapy, communication with their families has gradually increased, and art governance has also played a certain psychological role in comfort.

**Conclusions:** Mental disease is a disease in which brain function activities are disordered under the influence of various internal and external pathogenic factors, leading to varying degrees of obstacles to mental activities such as understanding emotions and will. Abnormal manifestations of various mental activities are various mental symptoms, and different combinations of various mental symptoms constitute different mental diseases. Antipsychotic drugs can effectively control the symptoms of psychosis, but they cannot relieve and release human emotions. Therefore, modern art therapy can alleviate the pathogenesis of the human body, mainly due to both physical and psychological factors. Modern art therapy affects mental activities such as emotion and mood, thereby changing people’s emotional experience and physical function state. The etiology of mental illness includes social factors, environmental factors, genetic factors, etc. Therefore, on the basis of drug treatment and psychological counseling for mental patients, attention should be paid to the development of modern art therapy.

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**DETECTION OF ABNORMAL EEG SIGNALS IN PATIENTS WITH SCHIZOPHRENIA BASED ON EXTENDED BAYESIAN CLASSIFICATION**

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**Background:** In the China’s disease burden survey, mental diseases have far exceeded the cardiovascular and cerebrovascular and respiratory diseases, ranking first in the burden of diseases. Mental health problems have become a public health and social problem that urgently needs to be solved in our country. Mental illness is a disorder of brain function that causes abnormal neurological diseases in patients with perception, thinking, emotion, and behavior. Faced with the competition and pressure of current social life, schizophrenia has become the most common mental illness in China. Such diseases have caused great distress to people, and the current diagnosis of schizophrenia lacks specific biomarkers. Schizophrenia is a high-incidence and more harmful mental illness, and timely and accurate diagnosis will help the treatment of this type of disease. The clinical manifestations of schizophrenia not only have certain similarities, but also change with changes in the patient’s mood. Therefore, the study of the etiology of schizophrenia is receiving more and more attention, and the exploration of its diagnostic methods is becoming a major focus of social concern. The abnormal detection of EEG signals of patients with schizophrenia and the generation of EEG can provide an important reference and objective basis for accurately distinguishing and diagnosing specific symptoms of schizophrenia.

**Objective:** Schizophrenia is a group of serious mental illnesses with unknown etiology. Clinically, it is often manifested as a syndrome with different symptoms. It involves various obstacles in perception,