

Application of Behavioral Activation Technology in Psychological Nursing of Female Patients with Depression

Zhang Puguo Xue Yunru and Dai Zunxiao*

Xi'an Mental Health Center, China

*Corresponding author: Dai Zunxiao, Xi'an Mental Health Center, China

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ABSTRACT

Objective: To explore the clinical effect of applying behavioral activation technology in psychological nursing of female depression patients.

Methods: The adult depression patients who were hospitalized in the Department of Women's Mental Health from June 1, 2021, to December 30, 2022 in a psychiatric hospital were randomly selected, and 64 patients who met the diagnostic criteria and exclusion criteria for depression in DSM-5 and whose HAMD was greater than 17 points were diagnosed. They were divided into the control group and the study group, with 32 patients in each group. The age and education level of the two groups were matched. The patients in the control group were treated with antidepressants, using any one of the five flowers of SSRI type, conventional dose medication, and routine daily care. The patients in the study group implemented behavioral activation technology for psychological care at the same time as the methods in the control group, evaluated and selected ADL, HAMD, SDSS, and observed the nursing target. The statistical analysis application statistical software was SPSS statistics26 version.

Results: Among the 64 cases, 4 cases fell off and 60 cases completed the observation. Among the five targets (doctor-patient relationship, adverse events, interpersonal relationship, social adaptability, and treatment compliance) after the implementation of behavioral activation technology intervention in psychological nursing, there was significant statistical difference between the study group and the control group ($P < 0.01$); The scores of HAMD, CGI, ADL and SDSS in the study group were also significantly different from those in the control group ($P < 0.05$).

Conclusion: The implementation of behavioral activation therapy in the psychological care of female patients with depression can not only improve the symptoms of depression, but also improve the functional damage of patients, help improve the treatment effect, and also make the compliance of nursing targets better, the occurrence of fewer adverse events, more harmonious interpersonal relationship, stronger social adaptability, and better doctor-patient relationship, It provides reference basis and empirical research data for the psychological nursing model of female patients with depression. It is worth popularizing and applying.

Keywords: Behavioral Activation Technology; Depression; Psychological Nursing; Assessment Scale

Introduction

In 2022, the number of people suffering from depression in China will exceed 95 million [1]. The lifetime prevalence of depressive disorder in adults in Chinese Mainland will be 6.8%. The prevalence of depression in 5.1% of women is significantly higher than that in 3.6% of men. The prevention and treatment of depression has aroused great concern and attention of the state and the people and is also one of the hot spots of current mental health workers and scientific

research. According to the statistics of the World Health Organization (WHO), the prevalence of depression worldwide is about 4.4%, with more than 350 million people suffering from depression, and about 1 billion people suffering from mental disorders [2]. After the prevalence of novel coronavirus infection, the cases of major depression and anxiety increased by 28% and 26% respectively, and the global burden of mental disorders became heavier [3]. Behavioral activation technology is one of the common psychotherapy methods in cognitive

behavioral therapy [4]. It changes the cognitive symptoms, depressive symptoms, emotional symptoms, etc. of depression patients by changing their irrational negative cognition, thinking and behavior. In order to achieve the therapeutic effect, the psychotherapy method has its own unique advantages. Since Jacobson and others claimed that it is the most effective component of cognitive behavior (CBT), behavioral activation technology (BA) has been accepted and used in the clinical treatment of depression [5]. The World Health Organization (WHO) also recommends that behavioral activation therapy combined with drug therapy is an effective method for patients with moderate to severe depression [6].

Behavioral activation therapy has the advantages and characteristics of simple operation, easy implementation and easier promotion. Lewinsohn and his colleagues have designed a set of relatively systematic and standardized treatment methods for depression [7,8]. In the clinical nursing work of psychiatric department, psychological nursing is also one of the routine nursing works, most of which are based on health education, with weak pertinence. There is no unified and standardized model for the psychological nursing research report of depression for reference, and psychological nursing is implemented for patients with depression, especially for women with depression, The clinical application of behavioral activation technology is one of the psychological nursing measures and technologies with characteristics and strong pertinence. This research can provide effective empirical research data and reference basis for nursing female patients with depression. It has strong clinical and practical significance.

Object and Method

Subjects

64 female patients with depression who were hospitalized in a psychiatric hospital from June 2021 to December 2022 were selected. The diagnosis was in accordance with the diagnostic criteria and exclusion criteria for depression in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [9], the fifth edition, compiled by the American Academy of Psychiatry. The HAMD Hamilton Depression Scale was more than 17 points. The subjects were randomly divided into two groups: the control group (32 cases) and the observation group (32 cases), aged 18-60 years. The age of the study group (38 ± 11 years old) was the same as that of the control group (39 ± 10 years old), and the difference was not statistically significant ($P > 0.05$); The education level was at junior high school or above. There were 32 patients in each group, and the conditions were matched. There was no significant difference in the balance test ($P > 0.05$).

Diagnostic tools: meet the diagnostic criteria and exclusion criteria for depression in (DSM-5) [9].

Assessment Tools

The accepted gold standard is used for objective evaluation. The severity of depression is assessed with the HAMD Hamilton Depression Scale, the damage degree of the ability of daily living is

assessed with the ADL scale, the clinical treatment effect is assessed with the CGI scale, and the social function is assessed with the defect, and the degree is assessed with the SDSS screening scale [10]. The depressive symptoms and overall comprehensive condition of the patients were followed up before treatment, after treatment and at 3 months after discharge. The CGI criteria for clinical efficacy evaluation are as follows:

- 1) Clinical recovery is defined as: all symptoms disappear.
- 2) The significant improvement of treatment effect is defined as: most of the symptoms disappear and the degree is significantly reduced.
- 3) The improvement of treatment effect is defined as partial reduction or slight reduction of symptoms.
- 4) Invalid clinical treatment is defined as no change or aggravation of symptoms.

The evaluation was conducted by the deputy chief psychiatrist and the chief psychiatrist who did not participate in the study. During the follow-up period, patients were kept in contact with each other through interview, evaluation, telephone and WeChat, and the following requirements were met:

- 1) Total HAMD score > 17 points.
- 2) If the patient is hospitalized again due to the aggravation of mental symptoms, one of the conditions shall be taken as the standard of relapse for statistical analysis.

Research Methods

First, the subjects were screened in strict accordance with the inclusion and exclusion criteria of the design, and the subjects who met the requirements were randomly divided into two groups, namely, the control group of 32 cases and the study group of 32 cases. The basic information was collected, and the age and education level of the two groups were matched. The treatment method was to give antidepressants to the patients in the control group, using any of the five SSRI flowers, conventional dose medication, and routine daily care, The patients in the study group were treated with antidepressant drugs, using any one of the five SSRI flowers in a conventional dose, and carrying out behavioral activation technology for psychological care at the same time of routine daily care. The steps were completed in strict accordance with the activation technology method BA treatment manual developed by Jacobson et al. [7,11], once every 3 days, 8-10 times in a row, and the treatment time was about 45 minutes.

Evaluation Indicators

It adopts internationally recognized CGI, ADL, HAMD and SDSS. The accepted gold standard was used to objectively evaluate the severity of depression. The HAMD Hamilton Depression Scale was used to assess the degree of impairment of the ability of daily living. The depressive symptoms and overall comprehensive condition of

the patients were followed up before treatment, after treatment and at 3 months after discharge. In the follow-up period, the total score of HAMD is more than 17 points or the patient is hospitalized again due to the aggravation of mental symptoms. In one of these cases, this will be used as the judgment standard for relapse.

Quality Control

The diagnosis shall be carried out by the person with the professional title or above of the chief physician of the psychiatrist, and the review shall be carried out by the person with the senior professional title. The evaluation of the scale is performed by the attending physician and the competent nurse with corresponding qualifications. The study has been approved by the Ethics Committee of Xi'an Mental Health Center (batch number: XAJWKY-2021041).

Data Analysis

All data were entered into the database, 64 cases were planned, and the number of cases that actually completed the observation was 60, and 2 cases in each group withdrew from the observation due to

the influence of the length of stay. The counting data were described by frequency and percentage, and the treatment effect rate and follow-up recurrence rate were compared by variance analysis; The measurement data were described in the form of mean ± standard deviation. The self-comparison and inter-group comparison of various scales were conducted using paired t-test, and the statistical analysis was conducted using SPSS statistics26 statistical software.

Results

The Statistical Comparison of ADL, HAMD, SDSS Evaluation Results Between the Study Group and The Control Group on the 30th Day of Treatment is Shown in Table 1

Table 1 shows that there is no significant difference in the evaluation results of the three scales between the two groups at the time of admission (p>0.05); There was significant difference between the two groups in the evaluation results of the three scales at the 30th day of treatment (p<0.01); After treatment, there were significant differences between the two groups in the results of three scales before and after treatment (p<0.01).

Table 1: Comparison of scores between the study group and the control group at admission and 30 days after treatment (X±S).

Group example number		ADL score	HAMD score	SDSS score
At admission				
Study group	30	24.50±3.50	55.00±11.50	11.50±3.50
Control group	30	25.25±3.25*	56.50±10.00*	11.35±3.55 *
t value		0.243	0.435	0.435
At 30 days of treatment				
Study group	30	9.50±1.50	11.50±2.50	5.40±1.50
Control group	30	14.50±2.50 **	20.00±3.50 **	9.50±2.50 **
t value		4.765	8.867	7.457

Note: *p>0.05 **p<0.01.

CGI Evaluation Results at Discharge

In the study group, 7 cases (23.33%) were cured, 1 case (3.33%) was ineffective, 10 cases (33.33%) were significantly improved, and 12 cases (40%) were improved. The total effective rate of 30 cases was 96.66% (29 cases), and the effective rate was 53.33% (16 cases). In the control group, 4 cases (13.33%) were cured, 8 cases (26.66%) were ineffective, 8 cases (26.67%) were significantly improved, and 10 cases (33.33%) were improved. The total effective rate of 30 cases was 73.33% (22 cases), and the effective rate was 40.00% (12 cases).

There was a significant difference in the efficacy between the study group and the control group, p<0.05 (X²=6.405).

See Table 2 for the Evaluation Results of Psychological Nursing Target

Table 2 shows that there are significant differences between the study group and the control group in the five psychological nursing targets, namely, doctor-patient relationship, interpersonal relationship, social adaptability, treatment compliance, and occurrence of adverse events (p<0.01).

Table 2: Evaluation results of psychological nursing target

Target	Research group rate % (N= 30)		Research group rate % (N= 30)		X ²	p
Doctor-Patient Relationship	28	93.33	20	66.67	6.667	<0.01
Interpersonal Relationship	26	86.67	14	46.67	10.8	<0.01
Social adaptability	25	83.33	13	43.33	10.335	<0.01
Treatment compliance	25	83.33	15	50	7.5	<0.01
Adverse Event	0	0	8	26.67	9.23	<0.01

Discussion

Domestic and foreign scholars, prevention and treatment guides, expert consensus and other scholars advocate the use of comprehensive methods for the treatment of depression, including the application and treatment of antidepressant drugs, the application of physical therapy such as electric shock and transcranial magnetic stimulation, the application of psychological therapy such as behavioral cognition and interpersonal relationship, the application and treatment of hospital rehabilitation and community rehabilitation, and the application and treatment of traditional Chinese medicine, acupuncture and other treatment methods for clinical treatment of depression. All have achieved different results. However, there is no research report on psychological nursing of female patients with depression. Foreign studies have shown that behavioral activation technology can successfully reduce the depression of depression patients [12], and domestic studies have also achieved certain results in applying behavioral activation technology to the treatment of childhood autism [13], and some studies have found that behavioral activation can treat patients in the way of group counseling, reducing the recurrence rate of patients [14]. As a routine part of psychiatric nursing work, psychological nursing is one of the routine contents. For female patients with depression, behavioral activation technology is a characteristic and highly targeted psychological nursing measure.

Through the comparative observation of 60 female patients with depression who applied behavioral activation technology for psychological nursing, it is shown that the score of the study group's HAMD Hamilton Depression Scale is lower than that of the control group, which proves that the depression has improved significantly. The difference was statistically significant. The higher score of CGI clinical treatment effect scale indicates that the treatment effect is good, and further validates and supports the relevant research conclusions at home and abroad [15-24]; The score of ADL daily living scale increased, indicating the improvement of life function; Among the five goals of psychological nursing (doctor-patient relationship, adverse events, interpersonal relationship, social adaptability, treatment compliance), the difference was statistically significant. The results showed that the study group was significantly better than the control group; The score of SDSS social function defect scale decreased, and the difference was statistically significant, indicating that social function was improved. Some researchers believe that behavioral activation therapy can better improve the quality of life of patients and is also easy to strengthen the healthy behavior of patients [16]. Through the clinical application effect of behavioral activation technology in psychological care of female depression patients, it was found that it can relieve female depression patients' emotional psychology of depression, anxiety, pessimism, tension and other emotions about their own diseases, which is the same as foreign research results [17-24].

In the implementation of psychological care for female patients with depression, the use of behavioral activation therapy technology can not only improve the depression of patients, make nursing

compliance better, and fewer adverse events, but also improve the treatment and nursing effect, and make social adaptability stronger, thus improving the life function and social function of patients, making interpersonal relationship more harmonious, doctor-patient relationship more harmonious, and improving the quality of life of patients. These findings can provide reference and empirical research data for the psychological nursing model of female patients with depression. The technology of behavioral activation method is one of the psychological nursing methods with simple operation and high income. Its further improvement and flexible implementation according to the actual situation of female patients with depression can effectively make greater contributions to the characteristic psychological nursing. Although this study has some shortcomings such as small sample size and insufficient time, the author believes that the application of behavioral activation technology in the psychological nursing of female patients with depression is worth promoting.

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