

Study on the Effect of Self-Help Mindfulness Therapy on Rumination in Patients with Depression

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Abstract: *Objective:* To evaluate the nursing effect of self-help mindfulness therapy for patients with depression. *Methods:* 120 cases of depression patients admitted to the Department of Psychosomatic Disorders of our hospital between January 2020 and January 2023 were selected. After being grouped by the random draw method, 60 cases in the observation group adopted self-help mindfulness therapy and 60 cases in the control group adopted conventional nursing care, the nursing effects were subsequently compared. *Results:* Before nursing, there was no difference in the comparison of clinical symptom scores, rumination scores, positive psychological scores, and self-esteem scores between the two groups ($P > 0.05$). After nursing, the clinical symptom scores of the observation group were lower than those of the control group; the rumination scores were lower than those of the control group; the positive psychological scores were higher than those of the control group; and the self-esteem scores were higher than those of the control group, and all of them were statistically significant ($P < 0.05$). *Conclusion:* Self-help mindfulness therapy can improve the clinical symptoms of patients with depression and their rumination, and enhance their positive psychological state and self-esteem level, which has high nursing advantages.

Keywords: Self-help mindfulness therapy; Depression; Rumination thinking

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1. Introduction

Depression is a chronic mental illness with high morbidity, which is characterized by reticence, low self-esteem, and depressed mood, and even leads to self-harm or suicidal tendencies, which seriously reduces the quality of life of patients^[1]. Rumination is a potential factor for the persistence or long-term relapse of the disease, which refers to the patient's passive and repeated thinking about the causes and consequences of a negative life event, which leads to the formation of a fixed pattern of negative thinking^[2]. Rumination can exacerbate the progress of mental rigidity, which in turn leads to depressive episodes or aggravates the condition of depression. Positive thinking, on the other hand, can regulate the degree of mental rigidity and thus improve the severity of depression^[3,4]. For this reason, 120 depressed patients were selected for this study to evaluate the positive

effects of self-help mindfulness therapy on rumination.

2. General information and methods

2.1. General information

120 cases of depression patients admitted to the Department of Psychosomatic Disorders of our hospital between January 2020 and January 2023 were selected and divided by the random draw method. There were 60 cases in the observation group, 25 males and 35 females; aged 32–63 (44.27 ± 3.95) years old; the duration of the disease was 0.6–4 (2.43 ± 0.59) years. In the control group, there were 60 cases, 22 males and 38 females; the age was 31–65 (44.37 ± 3.82) years old; the disease duration was 0.5–4 (2.49 ± 0.52) years. $P > 0.05$ after comparison of data between groups.

Inclusion criteria: depression diagnosed by the International Classification of Diseases, 10th edition (ICD-10), and depression score of 17–24; complete clinical data; adult patients; junior high school education or above, normal verbal and written communication skills; knowledge of the condition, informed and consent to the study.

Exclusion criteria: combined with other mental diseases; cognitive impairment; patients with severe depression.

2.2. Methods

The control group adopted routine nursing care: assessing the basic information and psychological state of the patients, explaining the admission instructions, introducing the qualifications of the medical and nursing staff of the department, the hospital environment, etc., and trying to eliminate the patients' sense of unfamiliarity. The patients were given educational brochures explaining their health knowledge of the disease and were comforted psychologically and instructed on the use of medication. After the patients were discharged from the hospital, the patients' psychological status and medication were assessed by telephone and home follow-up, and the patients were reminded of regular follow-up.

The observation group adopted self-help mindfulness therapy: choosing the combined method of in-hospital care + out-of-hospital care; before the care, a 30-minute training activity was carried out, and the form of training was based on the number of patients on that day, which can be one-on-one training before the bed or PowerPoint presentation group training. The relevant concepts of self-help psychological care and positive thinking therapy, training content, mechanism of action and efficacy, precautions, and continuous training methods were provided, and written materials were distributed to the patients to demonstrate the training essentials in a live demonstration. Subsequently, the patients were asked to imitate the training content to ensure that they were qualified to master the content, and they were then allowed to train at home. The daily training was 20 min, and the weekly training was more than 5 days, with a cycle of 8 weeks. During each training session, the patients were asked to take videos, write down the experience of the whole training process, and submit the training experience once a week.

2.2.1. In-hospital training steps

- (1) Entering a state of mindfulness: In the first week of admission, the nursing staff played the educational video or distributed written materials, explaining in detail the necessity, theoretical knowledge, and precautions of mindfulness therapy and popularizing the positive significance of self-help psychological care, and instructing the patients to adhere to mindfulness every day.
- (2) Mindful breathing: In the second week of admission, patients were guided to carry out mindful breathing training, focusing their attention on the inhalation and exhalation sensations of the abdomen,

without judging the patients' distracted state. Patients were instructed to carry out mindful breathing training every day in order to relax their body and mind.

- (3) Body scanning: In the third week of admission, patients were instructed to be aware of the subtle sensations in each part of the body, from the feet to the head or from the head to the feet, and could complete the body scanning training with soft music every day.
- (4) Mindfulness meditation: In the fourth week of admission, using breathing awareness as the basis of training, patients were instructed to shift focus from body scan to awareness of external environmental sounds, scanning thoughts, emotions, and other aspects, and carrying out non-selective awareness training, with mindfulness meditation practiced daily, accompanied by light music.

2.2.2. Out-of-hospital training steps

Mindfulness breathing training was carried out in the first week after discharge, body scanning training was carried out in the second week, and mindfulness meditation training was carried out in the third week in the same way as in-hospital training. In the fourth week after discharge, patients started to accept the training and review the above courses, choosing one training program each day.

2.3. Observation indicators

- (1) Clinical symptom scores: Hamilton Depression Rating Scale-17 items were selected, with five categories of factors, namely: anxiety and somatization, 6 items, 0–17 points; weight loss, 1 item, 0–2 points; cognitive impairment, 3 items, 0–12 points; sleep disorders, 3 items, 0–6 points; psychomotor retardation, 4 items, 0–14 points. For no depression, the score is < 17 points; for mild-moderate depression, the score is 17–24 points; for severe depression, the score is > 24 points.
- (2) Rumination score: Rumination Scale was used, with 22 items, and the Likert 4-level scoring method was implemented, all in 1–4 points, with a total score of 22–88 points, and the specific dimensions were as follows: symptom rumination (12 items), compulsive meditation (5 items), introspection and deep thinking (5 items), and the tendency of rumination was scored positively.
- (3) Positive psychological scoring: Mindfulness five-factor scale was chosen, with 39 questions, all on a scale of 1–5, and five factors: observation (8 questions); description (8 questions); mindful action (8 questions); non-judgment (8 questions); and non-reaction (7 questions), with positive scoring for positive psychological scoring.
- (4) Self-esteem level: Self-esteem scale (Chinese version) was chosen, with 10 items, all of which were 1–4 points, totaling 10–40 points, with positive scoring of self-esteem level.

2.4. Statistical methods

The data were analyzed by SPSS28.0 software, the measurement value was compared/tested by *t*-test, the count value was compared/tested by χ^2 , and $P < 0.05$ was statistically significant.

3. Results

3.1. Comparison of clinical symptom scores between the two groups

Before nursing, there was no difference in the comparison of clinical symptom scores between the two groups ($P > 0.05$). After nursing, the clinical symptom scores of the observation group were lower than those of the control group ($P < 0.05$) (Table 1).

Table 1. Comparison of clinical symptom scores between the two groups [mean ± standard deviation (SD), score]

Groups	Anxiety and somatization		Weight loss		Cognitive impairment		Sleep disorders		Psychomotor retardation	
	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Observation group (n = 60)	10.35 ± 2.31	5.01 ± 1.06	1.29 ± 0.33	0.42 ± 0.12	9.32 ± 1.65	4.53 ± 0.71	3.95 ± 0.47	1.03 ± 0.33	9.35 ± 1.53	5.02 ± 0.57
Control group (n = 60)	10.32 ± 2.28	6.98 ± 1.08	1.31 ± 0.32	0.69 ± 0.15	9.34 ± 1.61	6.94 ± 0.78	3.98 ± 0.42	1.57 ± 0.36	9.38 ± 1.51	5.49 ± 0.30
<i>t</i>	0.072	10.084	0.337	10.887	0.067	17.699	0.369	8.565	0.108	5.652
<i>P</i>	0.943	0.000	0.737	0.000	0.947	0.000	0.713	0.000	0.914	0.000

3.2. Comparison of rumination scores between the two groups

Before nursing, there was no difference in the comparison of rumination scores between the two groups ($P > 0.05$). After nursing, the rumination score of the observation group was lower than that of the control group ($P < 0.05$) (Table 2).

Table 2. Comparison of ruminative thinking scores between the two groups (mean ± SD, score)

Groups	Symptom rumination		Compulsive meditation		Introspection and deep thinking	
	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Observation group (n = 60)	26.35 ± 3.61	17.28 ± 1.34	12.03 ± 1.53	6.15 ± 1.30	11.29 ± 1.53	4.15 ± 0.53
Control group (n = 60)	26.38 ± 3.69	20.15 ± 1.36	12.05 ± 1.51	8.54 ± 1.38	11.34 ± 1.51	6.91 ± 0.58
<i>t</i>	0.045	11.644	0.072	9.765	0.180	27.211
<i>P</i>	0.964	0.000	0.943	0.000	0.857	0.000

3.3. Comparison of positive psychological scores between the two groups

Before nursing, there was no difference in the comparison of the positive psychological scores of the two groups ($P > 0.05$). After nursing, the positive psychological score of the observation group was higher than that of the control group ($P < 0.05$) (Table 3).

Table 3. Comparison of positive psychological scores of the two groups (mean ± SD, score)

Groups	Observation		Description		Mindful action		Non-judgment		Non-reaction	
	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Observation group (n = 60)	21.30 ± 3.15	26.18 ± 2.95	17.86 ± 3.53	23.29 ± 3.71	16.53 ± 2.41	22.68 ± 3.74	15.36 ± 2.41	20.13 ± 2.18	16.12 ± 2.05	21.34 ± 2.45
Control group (n = 60)	21.28 ± 3.12	23.12 ± 2.74	17.71 ± 3.55	20.12 ± 3.62	16.56 ± 2.37	19.86 ± 3.70	15.32 ± 2.45	17.05 ± 2.12	16.10 ± 2.06	18.01 ± 2.44
<i>t</i>	0.035	5.887	0.232	4.737	0.069	4.152	0.090	7.846	0.053	7.460
<i>P</i>	0.972	0.000	0.817	0.000	0.945	0.000	0.928	0.000	0.958	0.000

3.4. Comparing the self-esteem scores of the two groups

Before nursing, there was no difference in the comparison of self-esteem scores between the two groups ($P > 0.05$). After nursing, the self-esteem score of the observation group was higher than that of the control group (P

< 0.05) (Table 4).

Table 4. Comparison of self-esteem scores of the two groups (mean \pm SD, score)

Groups	Before nursing	After nursing
Observation group ($n = 60$)	15.48 \pm 2.72	32.38 \pm 3.59
Control group ($n = 60$)	15.53 \pm 2.68	28.81 \pm 3.42
<i>t</i>	0.101	5.577
<i>P</i>	0.919	0.000

4. Discussion

Depression is triggered by changes in the living environment, major life events, and increased work pressure, and its pathogenesis is related to neurobiochemistry, genetics, social environment, etc. Patients show obvious negative psychology, reduced self-worth, and somatization symptoms, and most of them need to take medication [5]. Previous studies have pointed out that rumination is a risk factor for the exacerbation or recurrence of depression, and rumination can be corrected through mindfulness therapy, so that patients can maintain a more optimistic mindset and control the condition [6,7].

Self-guided mindfulness therapy is a relatively new nursing model. Its goal is to alter negative thought patterns, helping patients become aware of their own behaviors, face their conditions correctly, and promptly dismiss distracting thoughts. This approach aims to control negative emotions, correct cognitive biases, enhance patients' self-body awareness, and ultimately improve their acceptance and understanding of the real world [8]. Self-help psychological care is centered on self-management theory, and standardized psychological care can be carried out. Mindfulness therapy, on the other hand, can reduce patients' disease symptoms and improve their quality of life. The method is flexible because of its low time consumption, simple training content, and reasonable treatment cost, and can be carried out at home [9].

The results showed that after nursing, the clinical symptom scores and rumination scores of the observation group were lower than those of the control group; the positive psychological scores and self-esteem levels were all scored higher than those of the control group ($P < 0.05$). The reason is that self-help mindfulness therapy can be trained using teaching manuals, videos, soft music, and other training forms, patients can use mobile phones or tablets, computers, and other smart devices for home training, which is diverse, rich in content, and interesting; it can gradually cultivate the patients' sense of self-care, divert their attention from their own condition, and then inhibit their rumination [10]. During the entire training process, the primary role of nursing staff is to guide and supervise, allowing patients and their families to take an active role. This approach helps avoid adding psychological burdens due to time and space limitations, making the training process more relaxed and comfortable, and significantly improving the patients' clinical symptoms. Based on the above advantages, the patients' psychological state can be improved, so that they can actively maintain a positive psychology and correctly understand their self-worth, thus the patients' positive psychological scores and self-esteem scores are higher [11].

5. Conclusion

In conclusion, self-help mindfulness therapy can improve the rumination and disease symptoms of patients with depression, effectively cultivate positive psychology, and improve their self-esteem level, which is a useful

nursing tool that is worth promoting.

Disclosure statement

The authors declare no conflict of interest.

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