

The Role of Psychological Intervention in Patients with Rheumatoid Arthritis

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Abstract: Objective: To analyze the effect of psychological intervention on patients with rheumatoid arthritis. **Methods:** The subjects included in this study were 78 patients with rheumatoid arthritis who visited our department from February 2021 to February 2022. Random number table method was used for grouping. Intervention group A received psychological intervention on the basis of routine intervention (n=39), intervention group B received routine nursing (n=39). Intervention effect, anxiety and depression scores, compliance and quality of life were used to evaluate the intervention effect of the two groups. **Results:** The comparison of intervention effects between intervention groups A and B showed that intervention group A was significantly higher ($P<0.05$). The scores of anxiety and depression in intervention group A and B were not significantly different before intervention ($P>0.05$), but significantly lower in intervention group A after intervention ($P<0.05$). Comparison of compliance between intervention groups A and B showed that intervention group A was significantly higher ($P<0.05$). The quality of life in intervention group A and B was significantly higher than that in intervention group A ($P<0.05$). **Conclusion:** The effect of psychological intervention on patients with rheumatoid arthritis is more prominent, which can eliminate the negative emotions of patients and improve their treatment compliance and quality of life. This method is worth popularizing in clinical practice.

Keywords: Psychological Intervention; Rheumatoid Arthritis; Intervention Effect; Anxiety and Depression; Compliance; Quality of Life

Introduction

Rheumatoid arthritis is a common clinical disease, mainly manifested as symmetric polyarticular swelling and pain. This disease is more common in middle-aged women, and can worsen with the prolongation of the course of the disease. It can cause damage to important organ functions, deformation of small joints in the limbs (as shown in Figure 1), and other dysfunction in patients. Currently, there is no clinical cure for this disease, which can lead to mental tension, anxiety, fear, and insomnia after the onset of the disease. For young and middle-aged patients, they are mainly concerned about the impact of disease on work and family life. For elderly patients, the main concern is that they become useless people unable to take care of themselves after becoming ill, which increases the burden on the family, thereby losing treatment confidence and being unable to better comply with treatment, ultimately having a significant impact on the treatment effect [2]. Therefore, this study aims to analyze the effect of psychological intervention on patients with rheumatoid arthritis.



Figure 1: Joint Deformities

1. Data and Methods

1.1 Basic Data

The subjects included in this study were patients with rheumatoid arthritis, with a total of 78 cases included from February 2021 to February 2022. Grouping method: Randomized number table method was used for grouping, with intervention group A receiving psychological intervention based on routine intervention (n=39), and intervention group B receiving routine nursing (n=39). After diagnosis, both groups of patients met the diagnostic criteria for rheumatoid arthritis, and their basic data were complete. After explaining the significance of this study to them, they were able to actively participate in the study. Persons with severe diseases of the heart, brain, kidney, and other organs, mental illness, cognitive impairment, and other factors who cannot cooperate with this study were excluded. The number of male and female patients in intervention group A was 16 and 23, aged 42-76 years, with a mean range of (58.76 ± 2.31) years, a course of 1-14 years, and a mean range of (7.65 ± 2.56) years. The number of male and female patients in intervention group B was 15 and 24, aged 43-75 years, with a mean range of (58.43 ± 2.54) years, a course of 1-14 years, and a mean range of (7.65 ± 2.56) years. There was no significant difference between the two groups ($P > 0.05$).

1.2 Method

1.2.1 Intervention Group B

This group received routine intervention, closely observing the patient's condition, giving them medication according to the doctor's instructions, and giving them medication guidance. Explain disease related knowledge to them, such as etiology, symptoms, treatment, and related precautions. At the same time, they were given dietary intervention, instructing them to focus on low-fat, high-protein, high-calorie, and vitamin rich foods, and avoiding spicy, raw, and cold foods.

1.2.2 Intervention Group A

This group adopts psychological intervention based on intervention in Group B. The methods are as follows:

(1) Building a good nurse-patient relationship: Nurses need to adopt positive language, expressions, and attitudes that affect patients' feelings and perceptions, and change their negative psychology and behavior. Assist them in rebuilding their confidence in treatment and rehabilitation. During daily rounds, nursing personnel need to actively hold the patient's hand, give them cordial greetings, understand their sleep, diet, and medication in detail, and provide them with appropriate guidance and assistance to enable them to experience the care and enthusiasm of nursing personnel. At the same time, strengthening communication with patients can facilitate communication from the perspective of life and encourage them to express their inner unhappiness. Nurses can provide them with positive relief while on the sidelines, so as to gain the full trust of patients and promote a good nurse-patient relationship.

(2) Creating a comfortable environment: After admission, patients will inevitably experience resistance to unfamiliar

environments. Therefore, it is necessary to create a comfortable inpatient environment based on the patient's preferences. If the patient loves flowers and plants at ordinary times, green plants can be placed in the ward, and if the patient loves movies and plays, they can be played. If the patient likes music, they can be given their favorite music. At the same time, the indoor temperature and humidity should be controlled within a reasonable range, and noise and strong light should be reduced. In addition, treatment and care for patients should be concentrated to avoid affecting their rest. For older patients, it is also necessary to take protective measures, such as placing anti-skid pads in the bathroom, and equipping the bedside with handrails and guardrails, to reduce the occurrence of adverse events.

(3) Humanistic environment intervention: Nursing personnel should have a high level of healthy psychology and professional accomplishment to reflect the humanistic environment. During the intervention period for patients, nursing personnel should possess high medical ethics and superb technology, as well as good psychological quality and humanistic literacy. Before caring for patients, they should continue to improve themselves, strengthen the learning of relevant knowledge, and enhance relevant skills. To correctly solve the problems that arise during patient communication, patient subjectivity and initiative are the key elements. It is necessary to encourage their active participation, listen to their ideas, and conduct in the form of "co participation" to better achieve goals. In addition, enhancing emotional communication between patients can improve their confidence. Emotions between patients can interfere with each other, which can have both positive and negative effects. Therefore, a patient with good therapeutic effects should be invited to share their personal treatment experiences, experiences, and feelings, thereby helping other patients gain confidence in treatment.

(4) Family cooperation and intervention: A warm and harmonious family relationship can greatly help patients' psychology. Therefore, nursing personnel should explain the impact of family and social intervention on patients' treatment to family members and friends, so that they can actively provide care and support to patients. At the same time, family members should also be given education to avoid their own emotions affecting the patient, and corresponding psychological intervention guidance should be given to facilitate their ability to provide relief to the patient.

1.3 Effect observation

1.3.1 Intervention effect

Determine the effect based on the improvement of the patient's symptoms. Among them, significant relief of patient symptoms is effective, ideal improvement of patient symptoms is effective, and no improvement of patient symptoms is ineffective. Calculation method: $(\text{significant} + \text{effective}) / \text{total number of cases} \times 100\%$.

1.3.2 Anxiety and depression scores

The anxiety and depression of the two groups of patients before and after intervention were evaluated using SDS and SAS scales. The higher the score, the more serious the negative emotions.

1.3.3 Compliance

Use the compliance evaluation table to understand the treatment compliance of the two groups. The grades are full compliance, basic compliance, and non compliance. Calculation method: $(\text{full compliance} + \text{basic compliance}) / \text{total number of cases} \times 100\%$.

1.3.4 Quality of life

The quality of life of the two groups was evaluated using the SF-36 scale, and a high score was associated with a high quality of life.

1.4 Statistical methods

The data obtained in the study were processed using SPSS 23.0 software. ($\pm s$) is used to represent measurement data, using a t-test; (%) is used to represent counting data and is tested with (χ^2). When the calculated $P < 0.05$, there is a significant difference between the objects being compared.

2. Results

2.1 Comparison of intervention effects between the two groups

Table 1 shows that the intervention effect comparison between intervention groups A and B shows that the intervention group A is significantly higher ($P < 0.05$).

Table 1 Comparison of Intervention Effects between the Two Groups [n, (%)]

Groups	Number of cases	Significant effect	Effective	Invalid	Intervention effectiveness (%)
Intervention Group A	39	24 (61.54%)	13 (33.33%)	2 (5.13%)	94.87% (37/39)
Intervention Group B	39	19 (48.72%)	10 (25.64%)	10 (25.64%)	74.36% (29/39)
χ^2	-	-	-	-	6.303
P	-	-	-	-	0.012

2.2 Comparison of anxiety and depression scores between the two groups

Table 2 shows that there is no significant difference in anxiety and depression scores between intervention groups A and B before intervention ($P > 0.05$), but after intervention, it can be seen that intervention group A is significantly lower ($P < 0.05$).

Table 2 Comparison of anxiety and depression scores between the two groups ($\bar{x} \pm s$) (points)

Groups	Number of cases	Anxiety score		Depression score	
		Before intervention	After intervention	Before intervention	After intervention
Intervention Group A	39	43.42 \pm 2.32	21.24 \pm 3.26	47.68 \pm 3.42	24.43 \pm 2.35
Intervention Group B	39	42.35 \pm 2.67	35.43 \pm 3.75	46.79 \pm 4.36	34.56 \pm 2.16
t	-	1.889	17.834	1.003	19.819
P	-	0.062	0.001	0.319	0.001

2.3 Comparison of compliance between the two groups

Table 3 shows that the compliance comparison between intervention groups A and B found that intervention group A was significantly higher ($P < 0.05$).

Table 3 Comparison of compliance between the two groups [n, (%)]

Groups	Number of cases	Complete compliance	Basic compliance	Noncompliance	Intervention effectiveness (%)
Intervention Group A	39	28 (71.79%)	10 (25.64%)	1 (2.56%)	97.44% (38/39)
Intervention Group B	39	23 (58.97%)	7 (17.95%)	9 (23.08%)	76.92% (30/39)
χ^2	-	-	-	-	7.341
P	-	-	-	-	0.007

2.4 Comparison of quality of life between the two groups

Table 4 shows that the quality of life of intervention group A and B is significantly higher than that of intervention group A ($P < 0.05$).

Table 4 Comparison of quality of life between the two groups ($\bar{x} \pm s$)

Groups	Number of cases	Quality of life
Intervention Group A	39	87.54±2.31
Intervention Group B	39	72.32±3.47
<i>t</i>	-	22.801
<i>P</i>	-	0.001

3. Discussion

Patients with rheumatoid arthritis are prone to anxiety and depression after long-term treatment, and the main reasons are as follows. Firstly, rheumatoid arthritis is a multiple inflammatory disease, autoimmune disease, and so on. The pain caused by the disease, the cumbersome treatment and examination, the prolonged illness, the limited daily activities, and the difficulty in recovering over time will inevitably cause patients to experience adverse emotions such as anxiety, depression, depression, and loneliness [4]. Secondly, patients exhibit anxiety and anxiety about their condition, as well as excessive worry, suspicion, and thinking about their condition, often becoming extremely sensitive to things [5]. Third, the impact of diseases, such as pain, disability, unemployment, etc., leads to panic and suspicion among patients, as well as doubts about the diagnosis and treatment of the disease [6].

In this study, psychological intervention was used in patients with rheumatoid arthritis. The results showed that the intervention effect of group A and group B was significantly higher than that of group A ($P < 0.05$). The scores of anxiety and depression in intervention group A and B were not significantly different before intervention ($P > 0.05$), but significantly lower in intervention group A after intervention ($P < 0.05$). Comparison of compliance between intervention groups A and B showed that intervention group A was significantly higher ($P < 0.05$). The quality of life in intervention group A and B was significantly higher than that in intervention group A ($P < 0.05$). The above research results suggest that psychological intervention can eliminate the negative emotions of patients, help improve their treatment compliance, thereby promoting treatment effectiveness, improving their related symptoms, and improving their quality of life. The author analyzes and believes that establishing a good nurse-patient relationship with patients, based on equality, respect, civilization, courtesy, care, fraternity, and sincere treatment of others, guides patients to confide in their difficulties and concerns [7]. Help them overcome depression with a rational and mature way of thinking, let them go out of the pain of illness, lay down their ideological burden, get rid of fear and depression, and make them cooperate with treatment with confidence [8]. For those who cannot take care of themselves, they should actively take care of their daily lives. Encourage their families, relatives, friends, and relevant social personnel to give care to patients, and actively participate in the relevant treatment of patients, so that they can receive care and consideration, and promote them to regain treatment confidence [9-10]. At the same time, attention should also be paid to treating different patients differently during the intervention process, encouraging them to ask questions, helping them solve the issues they are most concerned about, building a good nurse-patient relationship, and a high sense of trust. These are the keys to the success of psychological intervention [11-13].

In summary, the effect of psychological intervention in patients with rheumatoid arthritis is more prominent, which can eliminate the negative emotions of patients, improve their treatment compliance, promote their intervention effect, and improve their quality of life. At the same time, it can improve patient satisfaction. This method is worth popularizing in clinical practice.

References

- [1] Xu ZH. Effect Analysis of Systematic Health Education Nursing Model in Rheumatoid Arthritis Nursing [J]. *Medical Diet and Health*, 2022,20 (05): 147-150.

- [2] Wang Q. Evaluation of Psychological Nursing Effect on Anxiety and Depression in Patients with Rheumatoid Arthritis [J]. *Chinese Medical Guide*, 2021,19 (31): 177-179.
- [3] Li YH. Application Effect of Continuous Care in Patients with Rheumatoid Arthritis [J]. *China Urban and Rural Enterprise Health*, 2021,36 (10): 193-194.
- [4] Shen M, Li JX, Chang MX. The Effect of PDCA Circulation Combined with Psychological Care on Patients with Rheumatoid Arthritis [J]. *Psychological Monthly*, 2021,16 (23): 193-195.
- [5] Zhao CF. The Impact of Comprehensive Nursing on the Quality of Life of Patients with Diabetes and Rheumatoid Arthritis [J]. *Diabetes New World*, 2021,24 (18): 150-153+162.
- [6] Wang M, Wang XT. The Application Effect of Comprehensive Nursing in Patients with Rheumatoid Arthritis [J]. *China Minkang Medical Journal*, 2021,33 (17): 136-137+140.
- [7] Xu XQ. Research Progress on Family Function in Patients with Rheumatoid Arthritis [J]. *General Nursing*, 2021,19 (22): 3083-3085.
- [8] Tian L. Psychological Care and Health Education for Patients with Rheumatoid Arthritis [J]. *Chinese Medical Guide*, 2021,19 (18): 183-184+187.
- [9] Liang LJ. Psychoanalysis and Nursing Strategies for Patients with Rheumatoid Arthritis [J]. *Chinese Medical Guide*, 2021,19 (13): 193-194+197.
- [10] Wang HX, Ma YM, Xiao L, et al. The Impact of Collaborative Family Care and Health Education on Patients with Rheumatoid Arthritis [J]. *China Continuing Medical Education*, 2021,13 (11): 189-192.
- [11] Ye H. The Application Effect of Psychological Nursing and Health Education in the Clinical Care of Patients with Rheumatoid Arthritis [J]. *Capital Food and Medicine*, 2020,27 (04): 134.
- [12] Zheng J. Study on the Effect of Psychological Nursing Combined with Health Education on Patients with Rheumatoid Arthritis [J]. *Gansu Science and Technology*, 2019, 35 (24): 159-161.
- [13] Kang LQ. Evaluation of the Effect of Psychological Nursing Intervention on the Care of Rheumatic Patients [J]. *World Latest Medical Information Digest*, 2019,19 (94): 86-87.

Project topic: Research on the mechanism of iNKT cells in rheumatoid arthritis (20220628)