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Effect of nursing intervention based on continuity model on psychological stress state of patients with rheumatoid arthritis

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Abstract

To explore the effect of nursing intervention based on continuity model on psychological stress state of patients with rheumatoid arthritis (RA). A total of 128 patients with RA in our hospital from January 2015 to January 2017 were selected and divided into 2 groups by random number table method, 64 cases in each group. The control group received routine nursing, and the observation group received nursing intervention based on continuity model. The physiological function recovery, psychological stress, negative psychology, trait coping style and quality of life were compared between the 2 groups. Compared with the control group, the first time to get out of bed, the time to subside swelling of upper limb and the length of hospital stay in the experimental group were significantly shorter, the sleep time was significantly longer, and the visual analog scale score was significantly lower in the experimental group (all $P < .05$). After receiving nursing intervention, the psychological stress scores of somatizations, anxiety and depression of all patients were significantly lower than before nursing, and the above scores of the observation group were significantly lower than those of the control group (all $P < .05$). After nursing, the positive coping score, negative coping score and quality of life score of all patients were significantly higher than those before nursing, and the above scores of the observation group were significantly higher than those of the control group (all $P < .05$). Nursing intervention based on continuity model can promote the recovery of physical function, improve psychological stress and negative emotions, and improve the quality of life of patients with RA, which is worthy of clinical application.

Abbreviations: NC = negative coping styles, PC = positive coping styles, RA = rheumatoid arthritis, SAS = self-rating anxiety scale, SDS = self-rating depress scale, VAS = visual analog scale.

Keywords: continuity model, nursing intervention, rheumatoid arthritis (RA), state of psychological stress

1. Introduction

Rheumatoid arthritis (RA) is a chronic, systemic autoimmune disease with the basic pathological manifestations of chronic inflammation and pannus formation of joint synovium and destruction of articular cartilage and bone. Its clinical manifestations are mainly erosive and symmetric polyarthritis.[1] The exact pathogenesis of RA is unknown, but it is one of the main causes of loss of labor force and disability in humans. Early diagnosis and treatment are crucial.[2,3]

Nursing intervention based on continuity model refers to a new holistic nursing model that implements the concept of "people-oriented" in the whole nursing period, aiming to provide patients with high quality nursing services in spirit, psychology and emotion.[4] Therefore, it is of great significance to seek a personalized nursing intervention based on continuous model to meet the psychological needs of patients with RA in improving psychological stress and improving the quality of life. This study aims to provide nursing intervention based on continuity model for patients with RA, so as to improve the psychological stress state and quality of life of patients with RA.

2. Materials and methods

2.1. Study design and general information

A total of 128 patients with RA in the Department of Nephrology and Rheumatology of our hospital from January 2015 to January 2017 were selected, including 66 males and 62 females. The mean age was (47.19 ± 5.21) years (range, 32–56 years). The lesion sites were 69 cases (53.91%) on the left side and 59 cases (46.09%) on the right side. Marital status: One hundred twenty-one cases were married, accounting for 94.53%, 7 cases were unmarried, divorced or widowed, accounting for 5.47%. Education level: Ten cases of primary school, accounting for 7.81%, 113 cases of middle school and high school, accounting for 88.28%, 5 cases of university or above, accounting for 3.91%. Income status: Twenty-five cases of ≤140.68 $/month, accounting for 39.06%; 25 cases of >140.68 $/month, accounting for 60.94%. Employment status: Fifty-four cases were employed, accounting for 42.19%, 74 cases were laid-off or unemployed, accounting for 57.81%; 89 cases (69.53%) had a history of joint disease. Medical payment methods: Forty-one

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The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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cases were self-funded, accounting for 32.03%, 87 cases were public funds, accounting for 67.97%. The patients were divided into the observation group and the control group by random number table method, with 64 cases in each group. The study was approved by the Ethics Research Committee of Tangshan Workers' Hospital.

2.2. Inclusion and exclusion criteria

2.2.1. Inclusion criteria. The diagnosis was in accordance with the American College of Rheumatology 1987 and/or The European League Against Rheumatism 2010 RA classification criteria[5]; and all patients were newly diagnosed and had not been treated with antirheumatic drugs, active vitamin D drugs, immunosuppressants, glucocorticoids and tumor necrosis factor antagonists.

2.2.2. Exclusion criteria. Had taken vitamin D or its analogues within 6 months; cannot eat normally or stay in bed for a long time, cannot accept the sun; patients with thyroid diseases; complicated with serious liver and kidney diseases, diabetes and other serious diseases or other serious complications; and missing or incomplete clinical data.

2.3. Nursing methods

Patients in the control group received routine nursing. Nursing before treatment: For the patients treated the next day, pretreatment visits were conducted by the doctor in charge, the nurse in charge and the anesthesiologist in strict accordance with the medical procedures. The patients were told about the treatment time, successful cases of treatment, the risks of anesthesia and the precautions of anesthesia, etc, to ensure that the patients were consciously taken seriously, and to help the patients and their families build their confidence in defeating the disease. Health education: according to the level of education to implement targeted health education, avoid formatting, assist patients to establish a correct view of disease, with a positive attitude to the disease, mainly let patients understand the condition confidence, actively participate in the treatment of related discussions, establish trust, relieve pressure, and avoid medical disputes. Post-treatment care: Responsible nurses should take a high sense of responsibility and compassion, adopt a sincere attitude and kind inflammation to care for patients, guide patients and their families to double their care for patients, choose delicious diet, avoid mentioning sensitive topics in front of patients, and assist patients through the chemotherapy period. Discharge guidance: Instruct patients to carry out upper limb function training. Patients in the observation group adopted nursing intervention based on continuity model, and the specific measures were as follows:

2.3.1. Establishment of nursing intervention team based on continuity model. A nursing intervention team based on continuity model was established by 7 senior nursing staff, among which a deputy chief nurse was responsible for organizing and managing the members of the nursing team and health education for patients with RA; 3 graduate students from the department of nephrology and rheumatology served as researchers, mainly responsible for data collation, statistics and research; 3 nurses in charge of the department of nephrology and rheumatology were responsible for the implementation of nursing intervention strategies based on the continuity model, and each team was responsible for the nursing intervention activities of 10 to 12 patients. All the team members were trained by the continuous model nursing intervention course of RA for 6 months, passed the examination of theoretical and practical knowledge, and went to work after passing the examination. The members of the nursing intervention team based on the continuity model are jointly responsible for the follow-up and supervision of patients with RA to ensure the smooth implementation of nursing intervention based on the continuity model.

2.3.2. Pretreatment nursing. Nursing assessment: Comprehensive assessment of patients' psychological problems, acceptance ability, social background, education level and other factors, according to the disease uncertainty generated by negative psychology and psychological needs to establish an individualized specialized psychological support intervention model. Combined with the theory of evidence-based medicine integration design, the concept of humanistic care throughout the nursing period, by strictly trained responsible nurses to carry out nursing intervention. To establish continuous health education and psychological support intervention involving nurses, patients and patients' families. Health education: Tell patients and their families about the importance of early treatment, pretreatment self-control, post-treatment coping style and discharge rehabilitation treatment nursing compliance. Easy-to-understand text materials were developed, and interactive intervention was carried out with audio-visual materials such as commentary and music. Health education was carried out 1 to 2 times per day, 20 to 30 minutes per time from admission to treatment. Psychological support intervention: According to the ability to accept the personalized guidance, encouragement and suggest ways to implement treatment in patients with psychological communication, and use the support, understanding and care, increased compliance in patients with care and trust, and optimize the state of mind, alleviate psychological stress levels before treatment, increase self-efficacy, improve treatment ability to adapt. Responsible nurses should care and understand patients from the perspective of patients, guide patients to self-regulate emotional reactions, avoid negative emotions, make patients' psychological stress in a normal range, and ensure the smooth implementation of treatment. Listen to patients carefully to ensure that patients feel loved and respected. Responsible nurses have heart-to-heart talks with patients for >30 minutes, twice a week, and actively participate in patients' family life.

2.3.3. Post-treatment nursing. Pain nursing: According to the degree of pain and condition of patients to develop pain nursing intervention program. The responsible nurse instructed the patients and their family members to use both hands gently and circular caressed the pain site for 20 to 30 minutes, once or twice a day, until the pain was completely relieved, so as to reduce the degree of pain and promote the recovery of the body. Upper limb function support intervention: Patients with RA are prone to upper limb pain and swelling of the affected side after treatment, which seriously affects the rehabilitation of upper limb function. The responsible nurse made personalized multi-functional arm frame for patients 6 hours after treatment. After adjusting the height of the multi-functional arm frame, the affected limb was placed on the arm frame to ensure that the affected limb was slightly higher than the heart level. If there was obvious swelling, the affected limb should be appropriately raised 15 to 30 cm. Assist patients with elbow joint, wrist joint and interphalangeal joint flexion and extension training, 10 to 15minutes each time, every 2 hour training 1 time, promote blood circulation and upper extremity venous blood return. The responsible nurse instructed the patients to use music therapeutic touch alternately during the upper limb function support intervention, explained the purpose, significance and methods of music therapeutic touch to the patients and their families in detail, and instructed the patients to select their favorite music types in the music library and copy the selected music to the headphones for repeated listening. Ensure that the patient follows the instructions in the background of music to guide the patient to imagine good self-experience and beautiful scenery, to avoid joint stiffness and arm swelling.

2.3.4. Post-discharge rehabilitation nursing. Is made of homemade after kidney rheumatology expert guidance prove is made of homemade rheumatoid arthritis expert guidance prove feasible music rehabilitation exercise, with music singing during rehabilitation exercise, exercise movements including stroke, climbing wall, hand carry cubits, the swing arm, double shoulder stretch before and after, take a deep breath, etc. The exercise was performed with music rhythm for 8 beats, 15 to 20 minutes each time, twice/d, and continuous rehabilitation exercise was performed for 3 to 6 months until the upper limb function was fully recovered.

2.4. Observation indicators

2.4.1. Recovery of physiological function. The first time to get out of bed, sleep time 72 hours after treatment, visual analog scale (VAS) score 72 hours after treatment, upper limb swelling reduction time, and length of hospital stay were compared between the 2 groups. VAS was used to evaluate the degree of pain, and the higher the score, the more severe the pain.[7] The internal consistency reliability (Cronbach α coefficient) of VAS was 0.845, the correlation coefficient between each item was 0.61 to 0.75, the correlation coefficient between each item and the total score was 0.59, and the retest reliability was 0.79. The VAS scale has good reliability and validity.

2.4.2. Psychological stress. According to the Symptom Checklist-90 criteria,[8] 3 factors of somatization, anxiety and depression in the scale were used to evaluate the recent actual sensory status. The 5-level scoring system was used to score 1, 2, 3, 4, and 5 points according to none, mild, moderate, severe and very severe, respectively. The higher the score, the more severe the psychological stress. The Cronbach α coefficient of Symptom Checklist-90 was 0.854, indicating that the scale had good reliability and validity.

2.4.3. Negative psychology and trait coping style. The self-rating anxiety scale (SAS) and self-rating depress scale (SDS)[9] were used to evaluate negative psychology. SAS and SDS respectively included 20 items and adopted a 4-level scoring system. The score <50 was rated as no anxiety or depression, the score 50 to 59 was rated as mild anxiety or depression, the score 60 to 69 was rated as moderate anxiety or depression, and the score >70 was rated as severe anxiety or depression. The Cronbach α coefficients of the scale were 0.816 and 0.826, respectively, indicating that the SAS and SDS scales had good reliability and validity. Trait coping styles were evaluated according to the tinnitus coping style questionnaire,[9] which mainly included positive coping styles (PC) and negative coping styles (NC). NC had 20 items in 2 dimensions, and the 5-level scoring system was used. The higher score indicated the better trait coping style. The Cronbach α coefficients of PC and NC were 0.841 and 0.836, respectively, indicating that the scale had good reliability and validity.

2.4.4. Quality of life. According to the domestic self-made score standard for the quality of life of cancer patients, the assessment content includes 6 dimensions, including activities of daily living, self-awareness of cancer, family cooperation and understanding, sleep status, energy status and appetite status, and a 5-level scoring system is adopted.[10] The higher score indicates the better quality of life.

2.5. Quality control.

To ensure the continuity and integrity of statistical data, by 2 strict training of kidney rheumatology physician to the patients' general information, fill out and follow-up data management, fixed by 2 senior clinical trial participation of nursing staff and check the data of the input, avoid clinical trial participants due to personal factors on the index evaluation of bias, and improve the evaluation of objectivity.

2.6. Statistical analysis

The data of this study were analyzed by SPSS 18.0 statistical software (Version 18.0, SPSS Inc., Chicago), and the measurement data between the 2 groups were expressed as mean ± standard deviation by t test, and the count data between the 2 groups were analyzed by χ^2 test, $P < .05$ indicating statistical significance.

3. Results

There were no significant differences in age, marital status, education level, income status, employment status, history of joint diseases, medical payment methods, and other general information between the 2 groups. Baseline characteristics of the 2 groups are presented in Table 1.

3.1. Comparison of physiological function recovery between the 2 groups

The first time to get out of bed, the time to subside swelling of upper limb, and the length of hospital stay in the observation group were significantly shorter than those in the control group, the sleep time 72 hours after treatment was significantly longer than that in the control group, and the VAS score 72 hours after treatment was significantly lower than that in the control group, and the differences between the 2 groups were statistically significant (all $P < .05$), as shown in Table 2.

3.2. Comparison of psychological stress between the 2 groups

Before receiving nursing intervention, there was no significant difference in the psychological stress scores of somatizations, anxiety and depression between the 2 groups (all $P > .05$). After nursing, the above scores of all patients were significantly lower than before nursing, and the difference before and after nursing was statistically significant (all $P < .05$). The above scores of patients in the observation group were significantly lower than those in the control group (all $P < .05$), as shown in Table 3.

3.3. Comparison of negative psychology and trait coping styles between the 2 groups

Before nursing, there was no significant difference in SAS score, SDS score, PC score and NC score between the 2 groups (all $P > .05$). After nursing, the SAS score and SDS score of all patients were significantly lower than before nursing, and the PC score and NC score were significantly higher than before nursing, and the difference before and after nursing was statistically significant (all $P < .05$). The SAS and SDS scores of the observation group were significantly lower than those of the control group, and the PC and NC scores were significantly higher than those of the control group (all $P < .05$), as shown in Table 4.

3.4. Comparison of quality of life between the 2 groups

Before nursing, there was no significant difference in the quality of life score between the 2 groups (all $P > .05$). After nursing, the quality of life score of all patients was significantly higher than that before nursing (all $P < .05$). The quality of life score of patients in the observation group was significantly higher than that in the control group (all $P < .05$), as shown in Table 5.

Table 1

Baseline clinical characteristics of the study participants.

Variable	The observation group (n = 64)	The control group (n = 64)	t/χ^2	*P*
Gender, n (%)				
Male	34 (53.13)	32 (50.00)	1.154	.718
Female	30 (46.87)	32 (50.00)		
Age (yr), mean ± SD	47.21 ± 5.26	47.18 ± 5.19	0.033	.512
Site of lesion, n (%)				
Left	35 (54.69)	34 (53.13)	0.032	.521
Right	29 (45.31)	30 (46.87)		
Marial status, n (%)				
Married	60 (93.75)	61 (95.31)	0	.718
Unmarried/divorced/widowed	4 (6.25)	3 (4.69)		
Educational level, n (%)				
Elementary school	4 (6.25)	6 (9.38)	0.142	.218
Junior/Senior high school	58 (90.63)	55 (85.94)		
College/above	2 (3.12)	3 (4.68)		
Income status, n (%)				
≤140.68 $/mo	12 (18.75)	13 (20.31)	0.05	.314
>140.68 $/mo	52 (81.25)	51 (79.69)		
Employment status, n (%)				
Employed	26 (40.63)	28 (43.75)	0.128	.412
Unemployed	38 (59.37)	36 (56.25)		
History of joint disease, n (%)				
Yes	45 (70.31)	44 (68.75)	0.037	.321
No	19 (29.69)	20 (31.25)		
Medical payment method, n (%)				
Own expense	21 (32.81)	20 (31.25)	0.036	.506
Public expense	43 (67.19)	44 (68.75)		

SD = standard deviation.

Table 2

Comparison results of physiological function recovery between the 2 groups.

Group	N	First time out of bed (h)	72 h sleep duration after treatment (h)	72 h VAS score after treatment (point)	Upper limb swelling resolution time (d)	Hospital stays (d)
The observation group	64	18.52 ± 3.15	8.02 ± 1.36	1.25 ± 0.41	10.03 ± 1.46	11.32 ± 1.65
The control group	64	25.63 ± 4.32	6.01 ± 1.02	3.06 ± 0.81	16.95 ± 3.02	15.36 ± 2.18
t	–	10.639	9.459	15.95	16.504	11.821
P	–	<.001	<.001	<.001	<.001	<.001

VAS = visual analog scale.

Table 3

Comparison of psychological stress between the 2 groups.

Group	Period of time	Somatization	Anxiety	Depression
The observation group (n = 64)	Before receiving nursing intervention	2.36 ± 0.51	2.46 ± 0.46	2.53 ± 0.53
	After receiving nursing intervention	1.05 ± 0.31*	1.03 ± 0.25*	1.16 ± 0.28*
t	–	17.56	21.851	18.285
P	–	<.001	<.001	<.001
The control group (n = 64)	Before receiving nursing intervention	2.38 ± 0.48	2.48 ± 0.51	2.56 ± 0.42
	After receiving nursing intervention	1.65 ± 0.35	1.43 ± 0.42	1.56 ± 0.31
t	–	9.831	12.714	15.325
P	–	<.001	<.001	<.001

Compared with the control group after nursing.

*t = 10.266, 6.547, 7.660, retrospectively $P < .001$.

4. Discussion

4.1. Effect of nursing intervention based on continuity model on physiological function recovery of patients with RA

The exact pathogenesis of RA is still unclear. RA is a chronic systemic autoimmune disease with erosive and symmetric polyarthritis as the main clinical manifestations, which is one of the main causes of human labor loss and disability. Under the joint action of genetic, environmental, infection and other factors, immune damage and repair caused by autoimmune reaction are the basis for the occurrence and development of RA.[6] At present, RA cannot be cured completely, and the main goal of treatment is to achieve clinical remission without obvious symptoms and signs of inflammatory activity or low disease activity.[7] Therefore, it is very important to find biological indicators that can not only judge the activity of RA but also predict the progression of RA disease.

According to the results of this study, bed for the first time, time to upper limb swelling subsided, and hospital stays in the continuity model intervention were significantly lower than the patients

Table 4

Comparison of negative psychology and trait coping styles between the 2 groups.

Group	Period of time	SAS	SDS	PC	NC
The observation group (n = 64)	Before receiving nursing intervention	60.21 ± 5.21	60.35 ± 5.18	30.26 ± 5.46	30.15 ± 5.14
	After receiving nursing intervention	32.15 ± 4.16*	33.62 ± 4.25*	44.36 ± 4.25*	45.39 ± 2.97*
t	–	33.67	31.915	16.303	20.538
P	–	<.001	<.001	<.001	<.001
The control group (n = 64)	Before receiving nursing intervention	61.32 ± 5.18	60.33 ± 5.26	30.18 ± 6.01	30.12 ± 4.19
	After receiving nursing intervention	43.06 ± 6.03	44.61 ± 4.18	35.14 ± 5.26	36.01 ± 4.69
t	–	18.376	18.718	4.968	7.492
P	–	<.001	<.001	<.001	<.001

NC = negative coping styles, PC = positive coping styles, SAS = self-rating anxiety scale, SDS = self-rating depress scale.

Compared with the control group after nursing.

*t = 11.914, 14.749, 10.907, 13.518, retrospectively $P < .001$.

Table 5

Comparison of quality of life scores between the 2 groups.

Group	N	Before receiving nursing intervention	After receiving nursing intervention	*t*	*P*
The observation group	64	16.32 ± 2.68	28.61 ± 2.36	27.533	<.001
The control group	64	16.28 ± 2.71	20.14 ± 2.08	9.04	<.001
t	–	0.084	21.54	–	–
P	–	.412	<.001	–	–

with routine nursing, while 72 hours after the treatment of sleeping time in the continuity model intervention was significantly longer than patients with routine nursing, the nursing of 72 hours VAS score significantly lower after treatment. It is revealed that nursing intervention based on continuity model is helpful to promote the recovery of physiological function of patients with RA. The reasons are as follows: Nursing intervention based on continuity model according to the special group of patients to develop feasible and effective nursing intervention countermeasures, combined with clinical nursing routine, so as to improve treatment compliance, so as to play an important role in promoting the recovery of physiological function of RA patients. Patients with RA generally suffer from adverse psychological stress, such as fear, anxiety and depression, which seriously affect the recovery of patients' physiological functions.[11,12] Nursing intervention based on continuity model attaches importance to the concept of humanized nursing service of "people-oriented," guides patients' cognition and perception of disease-related knowledge during health education activities, improves treatment compliance, and finally improves physiological function recovery indicators.[13] Therefore, nursing intervention based on continuity model is helpful to promote the recovery of physiological function in patients with RA. Pain before treatment seriously affects the recovery of physiological function. Nursing intervention based on continuity model promotes the recovery of physiological function by paying attention to pain nursing and upper limb function support intervention.[14]

4.2. Effect of nursing intervention based on continuity model on psychological stress state of patients with RA

The diagnosis and treatment of RA have a negative impact on patients' psychology, which makes patients appear with extreme fear and anxiety, and the psychological stress state is a serious influence on the treatment and rehabilitation of the disease. According to the results of this study, before treatment, patients with nursing intervention based on the pattern of continuity and conventional nursing patients with psychological stress status, SAS scores and SDS scores, PC scores, there was no significant difference compared between NC score. After nursing, all patients with psychological stress status, SAS scores and SDS scores were significantly lower than the nursing before, the scores of PC and NC were significantly higher than those before and after nursing, and the differences were significant. Patients with nursing intervention based on the pattern of continuity of the score is superior to conventional nursing care of patients, both have the significant difference comparing, and reveals that the continuity model-based nursing intervention is helpful to improve psychological stress status in patients with RA. The reasons are as follows: Cancer diagnosis and treatment of patients with psychological stress to produce more negative effects. Before nursing intervention based on the pattern of continuity attaches great importance to the treatment phase of the nursing assessment, health education and psychological support intervention, and strict with stage before treatment nursing during the implementation of unified form and unified content and repeated, ensure continuity, systemic, and scientific nursing before treatment, effectively overcome the conventional nursing is not intuitive, shortcomings and so on various content, improving quality of care, avoid the adverse effects of adverse psychological stress on diseases.[15–19] Nursing intervention based on continuity model is more inclined to make patients get positive information to achieve positive mood. Nursing intervention based on continuity model can effectively avoid negative emotions, stabilize emotions, ensure the maintenance of a good state of mind, achieve the purpose of relaxing the spirit, and finally effectively improve the state of psychological stress.

4.3. Effect of nursing intervention based on continuity model on quality of life of patients with RA

According to the results of this study, based on the pattern of continuous nursing intervention patients compared with routine nursing patient quality of life scores had no significant difference. After receiving nursing intervention, all patients' quality of life score were significantly higher when compared with before receiving nursing intervention, which reveals that the nursing intervention based on the continuity model can help improve the quality of life of patients with RA. The reasons are as follows: The pain associated with RA seriously affects the quality of life, mainly including the pain caused by the disease itself and the pain caused by the disease treatment. Related literature shows that the sensitivity changes of peripheral nervous system and central nervous system after chest tissue injury are important

causes of post-treatment pain, but conventional analgesic treatment is still difficult to relieve acute pain after treatment.[20] Nursing intervention based on the pattern of continuous attention to closely observe the degree of pain, after treatment characteristics and the nature of nature of accurate evaluation of pain and pain degree, perfect the non-drug pain nursing intervention plan, for this massage pain, relax the effective treatment of muscle spasm pain, relieve muscle, improve microcirculation and local blood flow, and ensure the effective relief of pain and improve the quality of life. There is a close relationship between the function of the affected upper limb and the quality of life. During the nursing intervention based on the continuity model, the self-developed multifunctional arm frame is used to properly elevate the affected limb and assist joint function rehabilitation training, so as to improve the functional rehabilitation effect of the affected upper limb and ultimately improve the quality of life.[21] Nursing intervention based on continuity model attaches importance to music therapeutic touch and music rehabilitation exercise, so that patients can carry out rehabilitation training accompanied by music, which does not rely on any drugs, and use the special relationship between music and people to improve the body's health status. As an ideal "natural therapy," musical therapeutic touch and musical rehabilitation exercise directly affect brain stem reticular structure, limbic system, and hypothalamus through the special physiological effect of music, stimulate pituitary secretion and release of endorphins, so as to effectively improve the rehabilitation effect of upper limb function and improve the quality of life. Quality of life is an important indicator to evaluate the health status and nursing quality of patients, and healthy quality of life refers to people in a healthy state of social function, psychological function and physiological function.[22–27] Nursing intervention based on continuity model corrects patients' bad understanding of their own disease through upper limb functional rehabilitation training, enhances self-control and self-confidence, ensures the balance of spirit, psychology and physiology, and thus improves the quality of life.

In conclusion, nursing intervention based on continuity model is helpful to promote the recovery of physical function, improve psychological stress and negative emotions, and improve the quality of life of patients with RA, which is worthy of clinical application.

Author contributions

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