

## ORIGINAL RESEARCH

# The Impact of Emotional Care on Poor Mood, Quality of Life and Self-Efficacy in Patients with Chronic Primary Kidney Disease

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### ABSTRACT

**Objective** • To investigate the impact of affective care on poor mood, quality of life, and self-efficacy in patients with chronic primary kidney disease.

**Methods** • Between January 2020 and January 2021, 112 patients treated in our hospital were divided into a control group (n=55, receiving conventional care) and a research group (n=57, using emotional nursing in addition to conventional care), and the anxiety self-assessment scale (SAS) scores, depression self-assessment scale (SDS) scores, kidney disease quality of life (KDQOL-SF) scores, and the quality of life (KDQOL-SF) scores developed by the Center for Chronic Disease Education, Stanford University, USA were compared before and aftercare. The results of the study group were compared with those of the KDQOL-SF, the Self-Efficacy Scale developed by the

Center for Chronic Disease Education and Research, Stanford University, USA, and the adherence to care.

**Results** • After the intervention, the research group had lower SAS and SDS scores than the control group ( $P < .05$ ). After the intervention, all KDQOL-SF scores and all self-efficacy scores were higher in the research group than in the control group ( $P < .05$ ). The research group had a higher nursing care adherence rate of 92.98% than the control group of 78.18% ( $P < .05$ ).

**Conclusion** • Emotional nursing can help improve the poor mood of patients with chronic primary kidney disease, improve their quality of life, and strengthen their self-efficacy, and the overall nursing compliance of patients is higher, which is of high clinical application. (*Altern Ther Health Med.* 2024;30(6):254-258).

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### INTRODUCTION

Chronic primary nephropathy is a disease of the kidney caused by a variety of factors, with a high incidence of morbidity and mortality, and is characterized by clinical symptoms such as hyperlipidaemia and hypoproteinemia.<sup>1</sup> Chronic primary nephropathy is a lifelong disease and patients live with the disease for a long time, which leads to great changes in their social and lifestyle. The pain caused by the disease itself, the stressful stimulus of treatment, and the high cost of treatment cause patients to suffer from both psychological and physical stress, inducing anxiety, depression, and other negative emotions, and weakening their self-efficacy, resulting in a lower overall quality of life.<sup>2,3</sup> At present, chronic primary renal disease is not completely curable, but it can be effectively controlled. The control

process requires not only the combined effect of multiple therapies, mainly dialysis but also a positive psychological state and a high level of self-efficacy to adhere to good habits over time. Therefore, it is important to provide patients with scientific and effective nursing interventions in parallel with their treatment in order to alleviate their negative emotions and strengthen their self-efficacy.

Conventional nursing care focuses on disease with physiological interventions, mostly ignoring the psychological needs of patients or placing less emphasis on them. In recent years, however, the fast-paced, high-stress lifestyle has increased the psychological load on people, resulting in a steady increase in the incidence of various physical and mental illnesses. Emotional and psychological factors have been medically proven to play an important role in the development of disease, so there is an urgent need to build on conventional models of care, taking full account of the patient's physical and psychological state and the interplay between the two.<sup>4</sup> With the long history of practice and the development of a healthy China, there has been a rapid development in the field of emotional nursing in the field of Chinese medicine, which is a psychological model of physical and psychological adjustment guided by the basic theories of

Chinese medicine<sup>5</sup>. At present, the role of emotional nursing in cardiovascular diseases such as cerebral infarction and stroke has been proven<sup>6,7</sup>, but the effect of intervention in chronic kidney disease has been rarely reported in studies.

Therefore, this study will analyze the role of emotional nursing in the intervention of chronic primary kidney disease and provide a more comprehensive reference and guidance for future clinical care in chronic primary kidney disease.

## MATERIALS AND METHODS

### Preparation of the experiment

112 patients with chronic primary kidney disease who were treated in our hospital from January 2020 to January 2021 were randomly divided into a research group and a control group. In the control group, 55 patients received conventional care; in the study group, 57 patients received emotional nursing on top of conventional care. The study was approved by the ethics committee of our hospital and all study subjects signed the informed consent form.

### Inclusion and exclusion criteria

**Inclusion criteria:** meet the diagnostic criteria for chronic primary kidney disease; diagnosed  $\geq 3$  months; expected survival  $\geq 6$  months; receive complete treatment at our hospital after admission; normal cognitive function, literacy, and verbal communication skills, because we need to make sure that each research subject can communicate properly.

**Exclusion criteria:** Patients with combined malignancies; patients with combined severe chronic infections; patients with combined abnormalities of the heart, liver, and other vital organs; patients with other serious complications such as ketoacidosis; patients with combined psychiatric disorders; women during pregnancy and lactation.

### Methods

Patients in the control group received conventional nursing care, mainly including health education, dietary guidance, medication guidance, exercise intervention, and discharge guidance.

### In the research group, emotional nursing was added to the control group.

**Reasoning and enlightenment:** Reasoning and enlightenment is mainly to guide patients to change their unreasonable cognition through verbal communication and eliminate the bad mood caused by unreasonable cognition. The nursing staff communicates with the patient to understand the patient's current view of the disease and the importance they attach to self-care. For patients who overestimate chronic primary nephropathy and lack a correct understanding of the disease, nursing staff educate patients about the nature, risks, regression, and prognosis of chronic primary nephropathy to draw their attention to the disease and promote a better attitude towards the disease. For patients who are overly worried about the prognosis of the

disease and have anxiety and depression, the nursing staff cite past cases with significant treatment effects to enhance patients' confidence in treatment, inform them that cooperation with treatment and nursing care can significantly improve their prognosis, prompt them to face the disease with an optimistic attitude, answer their questions in a timely manner, and provide targeted relief for their anxiety and depression. Throughout the process of reasoning and guidance, we make good use of suggestion therapy to induce positive beliefs in patients and to correct their attitudes towards chronic primary kidney disease as a whole, so that they are not overly fearful or overly contemptuous, in order to induce changes in their own behaviour.

**Emotional nurturing:** Emotional nurturing is mainly about enhancing the patient's ability to regulate his or her own emotions. The nursing staff will tell the patient about the relevance of the "seven emotions" of the human body to the development of the disease, and tell the patient to pay attention to self-regulation of emotions, avoid violent emotional fluctuations such as great joy and grief, and have a moderate amount of happiness and anger. Within a reasonable range of mood swings, patients are encouraged to "follow their emotions and desires", i.e. to follow their own wishes and emotions and meet their own psychological needs. The nursing staff also encourages patients to explore ways of regulating their emotions, such as music appreciation, calligraphy, and painting, to keep their emotions stable and enjoy their bodies and minds, and physical exercise and walking to divert their attention when they are in an intense mood, to relieve their emotions as soon as possible. The patient's mastery of the methods of regulating emotions helps to adjust the qi and to ease the flow of qi and blood, to promote the spirit of internal conservation.

**Emotional and moral compatibility:** Emotional and moral compatibility can also be referred to as using emotions to overcome emotions, which refers to the use of various emotional stimuli to dilute and eliminate the patient's bad emotions. Nursing staff encourages patients to communicate more with their friends, neighbors, family members, relatives, and friends, and to take the initiative to confide in them, so as to avoid hiding bad emotions in their hearts for a long time. At the same time, nursing staff encourage the patient's family to communicate with the patient frequently and avoid accusations and loud reprimands in the process of communication; carry out outdoor activities with the patient and take the patient to places with beautiful mountains and clear water to relax and enjoy the mood; and eliminate the patient's bad moods such as anxiety and depression by encouraging the patient to communicate with people and objects outside.

**Regular follow-up visits:** The nursing staff will follow up with the patient once a month after discharge to understand the patient's disease development and living condition, ask him about his self-management of his emotions, listen to his confusion and solve it, advise him to follow medical advice on medication, self-manage his daily living habits and come to the hospital for regular review.

**Table 1.** Clinical data of the two groups of patients, there was no difference between the two groups.

	n	Gender (M/F)	Age (year)	Course of disease (year)	Length of education (year)	Type of disease				
						Chronic glomerulonephritis	Hypertensive nephropathy	Nephrotic syndrome	Diabetic nephropathy	Others
Research Group	57	35/22	54.39±4.39	4.78±1.21	12.23±2.11	23(40.35%)	12(21.05%)	10(17.54%)	7(12.28%)	5(8.77%)
Control Group	55	35/20	54.42±4.41	4.79±1.24	12.25±2.13	21(38.18%)	13(23.64%)	9(16.36%)	8(14.55%)	4(7.27%)
$\chi^2$ (or <i>t</i> )	-	0.060	0.036	0.043	0.050	0.055	0.108	0.028	0.124	0.085
<i>P</i> value	-	.807	.971	.966	.960	.814	.743	.868	.725	.771

**Outcome measures**

**Bad mood scores:** The anxiety self-assessment scale (SAS) and the depression self-assessment scale (SDS) were used to assess the patients’ bad mood before and after the intervention. The SAS scale was divided into mild (50-59), moderate (60-69), and severe (70 or more) according to the patient’s anxiety level with a cut-off score of 50; the SDS scale was divided into mild (53-62), moderate (63-72) and severe (73 or more) according to the patient’s depression level with a cut-off score of 53. The SDS scale is divided into mild (53-62 points), moderate (63-72 points), and severe (73 points or more).

**Quality of life scores:** Patients’ quality of life was assessed before and after the intervention using the Kidney Disease Quality of Life Short Form (KDQOL-SF),<sup>8</sup> which consists of eight dimensions: physical functioning, physical functioning, somatic pain, vitality, social functioning, emotional functioning, mental health, and general health.

**Self-efficacy scores:** The self-efficacy of patients was assessed before and after the intervention using the Self-Efficacy Scale developed by the Chronic Disease Education and Research Centre, Stanford University, USA. The scale consists of two dimensions: symptom management self-efficacy and disease co-management self-efficacy, with six items in total.

**Nursing compliance rate:** After the intervention, the patient’s compliance was evaluated with reference to the compliance scale developed by Zhang Yan et al.<sup>9</sup> It included compliance with the dialysis protocol, medication, diet, and fluids, and was divided into three levels of evaluation: full compliance, partial compliance, and non-compliance.

**Statistical methods**

The analysis software was SPSS 21.0 and the graphing software was GraphPad Prism 9.0. Information such as nursing compliance rate was expressed as [n(%)] and compared using the chi-square test; information such as SAS score was expressed as ( $\bar{x} \pm s$ ) and compared using *t* test, ANOVA, and LSD test. Differences were indicated as statistically significant at *P* < .05.

**RESULTS**

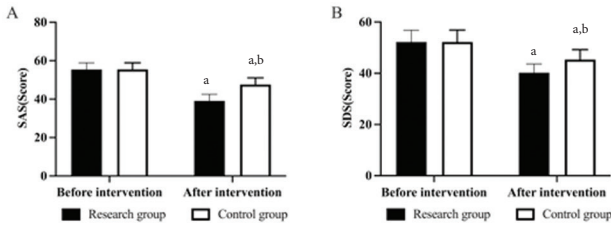
**Clinical data**

The clinical data of the two groups of patients, including age and gender, were collected for comparison, and the results showed that there was no statistical difference between the clinical data of the two groups (*P* > .05, Table 1).

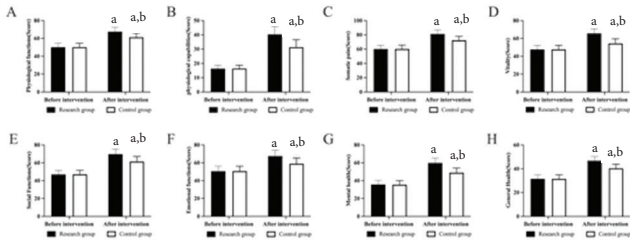
**Comparison of adverse mood scores**

Before the intervention, there was no significant difference in the SAS and SDS scores between the two groups

**Figure 1.** Change in adverse mood scores, both SAS/SDS were lower in the research group than in the control group after intervention. A) Change in SAS. B) Change in SDS.



**Figure 2.** Changes in quality of life scores, all quality of life scores were higher in the research group than in the control group after intervention. A) Changes in physical functioning. B) Changes in physical function. C) Changes in somatic pain. D) Changes in vitality. E) Changes in social functioning. F) Changes in emotional functioning. G) Changes in mental health. H) Changes in general health.



(*P* > .05). After the intervention, both groups showed a decrease in their dysphoria scores, and the research group showed lower SAS and SDS scores than the control group (*P* < .05, Figure 1A-B).

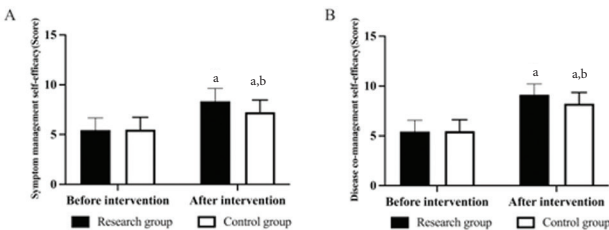
**Comparison of quality of life scores**

Before the intervention, there was no significant difference in the quality of life scores for physical function, physical functioning, somatic pain, vitality, social functioning, emotional functioning, mental health, and general health between the two groups (*P* > .05). After the intervention, all quality of life scores increased in both groups and were higher in the research group than in the control group (*P* < .05, Figure 2A-H).

**Comparison of self-efficacy scores**

Before the intervention, there was no significant difference between the symptom management self-efficacy

**Figure 3.** Change in self-efficacy scores, all self-efficacy scores were higher in the research group than in the control group after intervention. A) Change in symptom management self-efficacy. B) Change in disease co-efficacy management self-efficacy.



<sup>a</sup> $P < .05$  compared to the research group  
<sup>b</sup> $P < .05$  compared to control group.

**Table 2.** Comparison of nursing compliance between the two groups, adherence to care was higher in the research group than in the control group.

	n	Full compliance	Partial compliance	Non-compliance	Total compliance
Research Group	57	30(52.63%)	23(40.35%)	4(7.02%)	53(92.98%)
Control Group	55	25(45.45%)	18(32.73%)	12(21.82%)	43(78.18%)
$\chi^2$ (or $t$ )	-	-	-	-	5.008
P value	-	-	-	-	.025

and disease co-management self-efficacy scores of the two groups ( $P > .05$ ); after the intervention, the self-efficacy scores of both groups increased, and the symptom management self-efficacy and disease co-management self-efficacy of the research group were higher than those of the control group ( $P < .05$ , Figure 3A-B).

**Comparison of nursing compliance**

The research group had a higher nursing compliance rate of 92.98% than the control group of 78.18% ( $P < .05$ , Table 2).

**DISCUSSION**

The incidence of chronic kidney disease is currently on the rise worldwide, and the current incidence of chronic kidney disease in China is approximately 10.1% to 18.7%, with 8% to 10% of patients suffering from varying degrees of kidney damage.<sup>10</sup> Chronic kidney disease, especially chronic primary kidney disease, has a long and complex course, and patients suffer long periods of torture both physically and mentally, with many safety hazards, so nursing staff should pay attention to this.<sup>11</sup> Emotional nursing is a Chinese medicine approach to care. Emotion is a unique term for emotions in Chinese medicine, namely the seven emotions (happiness, anger, sadness, thought, grief, fear, and fright) and the five wills (anger, happiness, thought, worry, and fear), which refer to the body’s emotional responses to external things and phenomena and the physiological responses triggered by emotions.<sup>12,13</sup> Emotions are based on the essence of the five internal organs can reflect changes in the functions of the internal organs, and are important pathogenic factors.<sup>14</sup> Normal emotional activities can help to regulate the qi,

harmonize the Ying and Wei, facilitate the flow of the meridians, and calm the mind and spirit, which is conducive to good health, while abnormal emotional activities can lead to internal damage to the spirit and the stagnation of qi into fire.<sup>15</sup> The framework of the theory of emotion was first introduced in the Yellow Emperor’s Classic of Internal Medicine, which laid the foundation of emotional nursing in Chinese medicine, followed by Zhang Zhongjing and Hua Tuo, who gradually enriched the doctrine of emotion from different perspectives over the millennia. Since then, emotional nursing has become a characteristic model of TCM care and is gradually being applied in clinical practice.

Chronic primary kidney disease has a long course, many complications, and is prone to recurrence. Patients often experience anxiety, impatience, pessimism disappointment, or even negative emotions that resist treatment. Emotional nursing is tailored to the patient’s emotional and spiritual state, and the patient is given reasoning and guidance to correct his or her attitude towards the disease, reduce the negative emotions caused by misconceptions, teach the patient the method to enjoy the emotions and nourish his or her nature, and help the patient to regulate his or her emotions; under the guidance of the concept of the harmony of emotions and spirituality, the patient is given methods to soothe the heart and relax the emotions from the outside world, to harmonize the qi and blood and promote the recovery of positive energy.<sup>16</sup> On the whole, it effectively eliminates negative emotions such as anxiety and depression. This effect of emotional nursing was confirmed in our study: the SAS and SDS scores of the research group were lower than those of the control group after the intervention, which is good proof that emotional nursing can effectively alleviate the adverse emotions of patients with chronic primary kidney disease.

Chronic primary kidney disease causes cumulative damage to patients’ organs over a long period of time. As a result of the disease, patients’ physical functioning gradually declines and they gradually become restricted in their activities, requiring external support to carry out normal daily life. Self-efficacy can influence an individual’s health outcomes by regulating and controlling people’s behavior. This is demonstrated by the fact that when a person is faced with difficulties, self-efficacy determines whether or not they will adopt coping behaviors, how much effort they will need to make, and how long this effort will last.<sup>17</sup> This suggests that self-efficacy is important when individuals face difficulties with illness. Emotional nursing teaches patients how to regulate their emotions, encourages them to communicate with the outside world, and makes them feel supported by their families and society, which helps to increase their psychological resilience; at the same time, nursing staff also educate patients about chronic primary kidney disease, eliminating their sense of unfamiliarity with the disease and telling them that they can play an active role in the treatment and care of the disease, which helps to strengthen the patient’s sense of control over his own body, active self-emotional regulation, and actually strengthen his sense of



self-efficacy and reduce emotional and psychological abnormalities.<sup>18</sup> Our study showed that the self-efficacy scores of the research group were higher than those of the control group after the intervention, suggesting that emotional nursing can strengthen the self-efficacy of patients with chronic primary kidney disease.

In the comparison of quality of life between the two groups, we found that the research group had higher quality of life scores and nursing care compliance rates than the control group after the intervention, presumably because the emotional nursing alleviated adverse emotions, strengthened self-efficacy, patients gained positive affective influence, fully recognized the positive impact of nursing care, had a higher degree of cooperation with nursing care measures, and gained more positive guidance in the nursing care process, thus The patients were able to apply the acquired emotional regulation methods and health knowledge to their practice, influencing physiological and social functions, etc., promoting better treatment of the disease while gaining mental health, thus improving the quality of life in general.<sup>19,20</sup>

## CONCLUSION

Emotional nursing can help improve the mood of patients with chronic primary kidney disease, improve their quality of life, and strengthen their self-efficacy, with high overall patient compliance and high clinical value. We recommend universalizing the use of Emotional nursing in the treatment of primary kidney disease in the future, which can provide more reliable treatment and recovery for patients.

However, due to the limited conditions of this study, there are still many limitations to be improved. For example, the small number of cases included and the short period of time for case collection may cause statistical calculation chance. In the future, we should further expand the sample size extend the sample selection time, and conduct a more in-depth analysis of the role of emotional nursing in the care of chronic kidney disease, to provide more reliable references for clinical care.

## CONFLICTS OF INTEREST

The authors report no conflict of interest.

## AVAILABILITY OF DATA AND MATERIALS

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## FUNDING

Not applicable.

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