

The Effect of Nursing Intervention on the Psychological States of Hemodialysis Patients with Uremia

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ABSTRACT Objective: To investigate the effect of nursing intervention on the psychological states of hemodialysis patients with uremia. **Method:** 57 hemodialysis patients with uremia who received regular hemodialysis in our hospital were gathered, and were divided into the control group and the research group randomly, between which the control group was treated giving routine life nursing care, while the research group was given psychological nursing care with the same treatment of the control group as a basis. Then, Zung Self-rating Depression Scale (SDS) and Self-rating Anxiety Scale (SAS) were used to evaluate the psychological states of hemodialysis patients with uremia before the intervention and five months after the intervention respectively. **Results:** Three months later, in the research group, the scores of SDS and SAS of those 27 hemodialysis patients with uremia reduced 5.7 points and 5.5 points respectively; the results were significantly higher than those of the control group, and differences were statistically significant. **Conclusion:** Reasonable and effective nursing intervention can relieve the anxiety and depression of hemodialysis patients with uremia and can prevent the development of bad psychological factors.

KEYWORDS

Hemodialysis
Nursing intervention
Self-rating
Anxiety scale
Depression scale

1. Introduction

As a kind of disease, uremia is familiar to people. Meanwhile, people are all afraid of it. Relatively speaking, uremia is not only a kind of single disease, actually it is induced by many different reasons. It is a kind of clinical syndrome jointly attributed to various terminal kidney diseases. For example, when chronic renal failure reaches a certain level, uremia will appear. The major causes are prostate hyperplasia, stone and so on. Moreover, there always existent gastrointestinal bleeding, sallow face or anemia among those people with uremia; as for female patients, there always exists abnormal menstruation. Hemodialysis is an effective replacement therapy to treat acute and chronic renal failure. If there is no suitable kid-

ney source to be transplanted, hemodialysis patients with chronic renal failure and uremia will need long-term hemodialysis. And those patients can develop various psychological problems always because of the pain caused by disease, the stress caused by economy and the influences caused by family and society. Psychological problems also have side effects on treatment effect. Meanwhile conversely, the discontented results will have an influence on patient's mentality and so forth, finally forming a vicious circle. As for the psychological problems of hemodialysis patients with uremia, we tried to intervene in view of nursing, interrupted the cycle, and clinically offered intensive care to the patients. Finally, we achieved satisfactory therapeutic effects [1-3].

2. Materials and methods

2.1. General information

Those 57 hemodialysis patients with uremia all received treatment in the hemodialysis center in our hospital from June 2013 to January 2015. They were divided into two groups randomly, 27 patients in research group and 30 patients in control group. The differences between two groups in gender, age, educational background, period of hemodialysis and severity of disease were not statistically significant.

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2.2. Nursing intervention methods

The control group was given conventional hemodialysis nursing, while the research group was given psychological nursing on the basis of the same treatment of the control group. The measures of psychological nursing are psychological nursing before, during and after dialysis.

There should be good communication between the patients and doctors before dialysis, and the mental state and psychological need of the patient should be well understood. As for the patients who were not in good state, the nurse should talk with them actively, listen patiently and find the reasons for their poor mood, then give them psychological guidance in time. As for the hemodialysis patients with uremia who have not seen the doctor before, the nurse should give them a comprehensive introduction to the disease, making them realize their condition, have a correct understanding about the illness, and remove their intense fear toward hemodialysis. According to the cultural diversity of patients, appropriate languages or dialects should be used to introduce basic information about hemodialysis as well as considerations during the dialysis [4].

During the dialysis, the numerical variation of the dialysis machine as well as the change of vital signs should be detected to find out patient's discomfort in time. Moreover, the nurse should come to the patients and ask about their feelings frequently, give them guidance about correct posture, and give them appropriate positive suggestible dialogue to enhance their confidence. Hemodialysis patients with uremia should be offered a brochure, newspaper and periodical relevant to the disease, so that on the one hand they can know their conditions and increase disease-resistant confidence; on the other hand, there is something for patients to do, distract their attention and reduce their discomfort caused by hemodialysis.

After the dialysis, the nurse should help the patients get dressed, ask them whether there is any discomfort, and tell them to have a rest. Then the patients will be ready to leave if there is no discomfort. According to the patient's psychological need, communication should be carried out with their family members, so that the patients can get timelier and more appropriate concerns from their family. And such concerns are mainly reflected in some details in life, and can increase patient's confidence markedly, then it can form psychological hint, at the same time it has an important influence on the treatment. What is more, the date for the next dialysis as well as considerations when they are at home should be made clear to the patients, especially

guidance about their diets. Regular home review should be carried out, and detailed enquiry and record should be done. Once there is any discomfort on patient's body, timely communication should be made with their family members, and then the patient needs to be sent to hospital to receive monitoring and treatment [5-7].

2.3. Methods to evaluate psychological states

The Self-rating Depression Scale (SDS) and Self-rating Anxiety Scale (SAS) were used to evaluate the psychological states of hemodialysis patients with uremia.

2.4. Statistical method

All the values used mean value \pm standard deviation ($\bar{x} \pm s$) to express, and used SPSS 16.0 software package to do the statistical analysis. Independent sample *t*-test was used to compare those two groups, while pairing *t*-test was used to compare pre-treatment and post-treatment of each group. The specified examining efficiency is $p < 0.05$.

3. Results

3.1. Self-rating anxiety scale scores of the patients in the two groups before and after nursing intervention

Before nursing intervention, the SAS scores of the patients in two groups were compared, and there was no obvious difference. After five months, the SAS scores of the patients in the research group have declined obviously, and the differences were statistically significant ($p < 0.01$), while the SAS scores of the patients in the control group had no obvious change ($p > 0.05$). Five months after the nursing intervention, the scores of research group were obviously lower than those of control group, and the differences were statistically significant. See Table 1.

3.2. Self-rating depression scale scores of the patients in two groups before and after nursing intervention

Before nursing intervention, the SAS scores of the patients in two groups were compared, and there was no obvious difference.

After five months, the SDS scores of the patients in the research group have declined obviously, and the differences were statistically significant ($p < 0.01$), while the score change of SDS of the patients in control group was not statistically significant ($p > 0.05$). Five months after nursing intervention, the scores of the research group were obviously lower than those of the control group, and the differ-

Table 1. The SDS and SAS scores comparison of the hemodialysis of uremia patients in two groups.

Group	Cases		SAS	SDS
Control group	30	Before treatment	54.0 \pm 4.1	48.9 \pm 1.7
		After treatment	53.5 \pm 3.8	50.5 \pm 2.0
Research group	27	Before treatment	52.8 \pm 5.0	51.2 \pm 1.4
		After treatment	47.6 \pm 4.8*	45.8 \pm 2.1*

Remark: *Represents that it is compared with the pre-treatment, $p < 0.05$.

ences were statistically significant. See Table 1.

4. Discussion

Uremia is also called end-stage renal disease, which needs maintenance hemodialysis. The patients have psychological problems in different degrees clinically. Zhao Aiqing [1] did the retrospective analysis toward the psychological problems of 121 maintenance hemodialysis patients with uremia, and found that the problems mainly include tension, fear, anxiety, hopelessness and non-expectation, pessimism and despair, depression, worrying as well as sense of guilt. Among all of the feelings above, anxiety and depression are the important factors which affect the living quality and treatment effect of the hemodialysis patients with uremia.

The patients' psychological problems are related with their age, education background, family status as well as the period of the disease. Wu Min [2] used phenomenological method to interview the patients, conduct psychological research and nursing intervention. She found that those four patients who have college degrees or above with low income have more serious psychological problems.

Dong Feng's [3] research showed that good psychological nursing can improve poor psychological states and living status. The research also found that comprehensive nursing intervention can reduce the anxiety and depression of the patients and improve the living status. Meanwhile, during the study, he found that as for hemodialysis patients with uremia, appropriate psychological nursing can enhance their will of living, as well as increase their confidence towards the curing of the disease. In summary, comprehensive nursing intervention had certain stimulation towards the whole treatment effect. Nowadays, the medical model is biology-psychology-society, and psychological health is the important indicator of physical health and life quality. Therefore, strengthening the psychological states evaluation of patients and initiating comprehensive nursing are

important measures to improve patient's living quality. All above have great practical and theoretical significance, and can be used for reference for the development and innovation of the medicine, and it is worthy for further study.

5. Conclusion

Conventional nursing care together with psychological nursing intervention can improve the psychological states of hemodialysis patients with uremia effectively, and can reduce patients' anxiety and depression.

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