Reply to PEER-REVIEW REPORT

Reviewer's code: 04227304

Examples – using the word "healing' throughout the text when it is not needed ("invasive healing", " healing compliance "),

Reply : Thank you, we have changed it

the abstract is not understood and abbreviations are used without their definition (HAMA and HAMD),

Reply : Thank you, we have added it

intro – data is missing on the reason for the need in their intervention, why dialysis patients are different than any other dialysis patient (otherwise I don't see the relevance to this journal),

Reply : Patients with diabetic kidney disease undergoing hemodialysis differ from other dialysis patients due to several factors. Firstly, the underlying cause of their renal disease is distinct, resulting from diabetic kidney injury. Secondly, diabetic kidney disease is closely associated with the increasing incidence of diabetes, which brings additional complications and comorbidities. Lastly, patients with diabetic kidney disease may exhibit unique challenges, such as disease and program awareness, compliance with care, and a higher likelihood of developing complications during hemodialysis. These differences necessitate tailored interventions and care approaches for this specific patient population.

methods – "the upper the mark", and so on. Other issues: 1. Introduction – How is dialysis a treatment for diabetic nephropathy? This is only the last treatment option in patients with ESRD. **Reply :** It is important to note that dialysis is not a cure for diabetic nephropathy or ESRD. It is a life-sustaining therapy that requires regular sessions, typically several times a week. In some cases, individuals may undergo a kidney transplant as a long-term solution. Nevertheless, dialysis remains a crucial treatment option, providing an artificial means of performing essential kidney functions and improving the quality of life for individuals with diabetic nephropathy and ESRD.

In conclusion, dialysis serves as a treatment for diabetic nephropathy in patients with ESRD when other options have been exhausted. It helps remove waste products, regulate fluid and electrolyte balance, and manage complications associated with the disease. Dialysis is a vital therapy for individuals with diabetic nephropathy, ensuring the maintenance of critical kidney functions and improving their overall well-being.

2. Methods – a. "(do not classify! Directly write diabetic nephropathy)" – what it means?

Reply : Thank you, we have changed it

b. "duration of 6-13 years, with an average of (10. 01 ± 2. 04) years" – of what?c. All the demographic characteristics should appear in the results.

Reply : Thank you, we have changed it

The methods should describe how the intervention was performed. The authors should add information on how patients were randomized between the groups.

Reply : To implement random allocation, we used a random number generator or statistical software to randomly assign patients to different groups. This ensures that each patient has an equal chance of being assigned to the control or study group before the start of the study and helps reduce bias in the research results.

The method of random allocation effectively eliminates differences among patients and ensures that the different groups have similar demographic characteristics. By utilizing random allocation, we can compare and evaluate the impact of person-centered care on patients with diabetic nephropathy without interference from other factors.

It is important to note that during the process of random allocation, it is crucial to ensure that both the researchers and patients are unaware of their group assignments to prevent bias. Additionally, it is necessary to determine appropriate random allocation methods based on the research objectives and sample size to ensure the scientific rigor and reliability of the study.

In summary, random allocation is a commonly used method that allows for the effective allocation of patients to different groups, ensuring comparability among the groups during the research process. In this study, the method of random allocation was utilized to divide patients with diabetic nephropathy into control and study groups to assess the impact of person-centered care on patients. This approach can provide reliable research results and offer valuable insights for improving the care of patients with diabetic nephropathy.

d. How could you ensure that nurses were not humanized with patients in the control group? Both groups were during the same time period or not?

Reply : Both groups were during the same time period. The control group was given routine nursing, and the study group was given humanized nursing on this basis. The specific humanistic nursing process is trained uniformly, so it is not subjective

e. Negative emotion Comparative – please elaborate on the tool used.

Reply : Negative emotion Comparative: The Hamilton Anxiety Rating Scale(HAMA) and Hamilton Depression Rating Scale(HAMD) were used to assess the negative emotion.

The Hamilton Anxiety Rating Scale (HAMA) and Hamilton Depression Rating Scale (HAMD) are commonly used assessment tools in the field of mental health. These scales were developed by psychiatrist Max Hamilton and are widely used for evaluating the severity of anxiety and depression symptoms, respectively.

The HAMA is specifically designed to measure the intensity and frequency of anxiety symptoms in individuals. It consists of 14 items that assess various anxiety-related symptoms such as tension, apprehension, nervousness, and insomnia. Each item is rated on a scale from 0 (no symptoms) to 4 (severe symptoms). The total score on the HAMA can range from 0 to 56, with higher scores indicating greater anxiety severity. On the other hand, the HAMD is used to assess the severity of depressive symptoms. It consists of 17 items that evaluate various aspects of depression including mood, guilt, sleep disturbances, and suicidal ideation. Similar to the HAMA, each item on the HAMD is rated on a scale from 0 to 4. The total score on the HAMD can range from 0 to 68, with higher scores indicating more severe depressive symptoms.

Both the HAMA and HAMD are valuable tools for clinicians and researchers in assessing and monitoring the severity of anxiety and depression. They provide a standardized and structured approach to evaluating symptoms and can be used to track changes in symptom severity over time. These scales assist in making informed treatment decisions, evaluating treatment effectiveness, and conducting research studies related to anxiety and depression.

It is important to note, however, that these scales should be used as part of a comprehensive assessment and should not be the sole basis for diagnosing anxiety or depression. A qualified healthcare professional should interpret the results and consider other factors before making a diagnosis or determining treatment options.

f. Why Bun and Scr are relevant in dialysis patients? Scr is not relevant in these patients and I don't understand the relevance to the presented intervention.

Reply : BUN and Scr are indicators of renal function, we are to confirm whether human care has an effect on the recovery of the patient's disease

3. Results: a. Was there a difference in the levels of emotion score between the HAMA and HAMD after intervention?

Reply : HAMA and HAMD marks in the study cluster and the control cluster before nursing, P > 0. 05, and HAMA and HAMD marks in the study cluster and the control cluster after nursing, P < 0. 05.)

Reviewer's code: 02624393

The term "diabetic nephropathy" currently is reserved to diabetes mellitus patients with glomerular lesions proven in a renal biopsy. Therefore the authors may change this term to that of "Diabetic Kidney Disease". That is a more general concept that includes a wide kind of renal lesions. - All my suggestions are done on the original pdf in red colour. There are numerous misspelling as well as MINOR comments on the original pdf, also in red colour. In my opinion the text merits an English native speaker assistance.

Reply : Thank you, we have changed it. Details above the modification of the original text have traces of modification, please check

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Reviewer's code: 04227304

Thank you for the opportunity to review this paper once again. The authors have addressed all my notes in their response letter, however I am not sure if the article has improved enough to consider its publication. In general, the authors need to understand that reviewers give their time and efforts to offer help and guidance. Therefore, it is expected that the authors would address all the comments in the manuscript's text, and if no changes are made in the text regarding a specific comment, the authors should explain why. In addition, the authors should indicate in their response letter where the changes were made in the text (paragraph and line). Having said that, I still feel the paper needs extensive English editing. From the abstract to all parts of the text, the grammar has many mistakes and the text is not written in accepted standards for a scientific paper. For example, in the intro – "diabetic kidney disease is closely associated with the increasing incidence of diabetes", "enhance their life", "it can damage the blood vessels and filters in the kidneys", and so on.

Thank you for your comments. We apologize for the poor language of our manuscript. We worked on the manuscript for a long time and the repeated addition and removal of sentences and sections obviously led to poor readability. We really hope that the flow and language level have been substantialy improved.

Other issues: 1. Intro: Hemodialysis is not the main method to treat DKD – it is only the main method for end-stage kidney disease of any reason. The real methods for DKD are glycemic and HTN control, ACEi or ARBS, SGLT2i and so on.

In the original article, we have added:

It is important to note that hemodialysis is not a cure for diabetic kidney disease, but rather a supportive therapy to manage symptoms and maintain overall health.

However, it is important to note that hemodialysis is not a cure for diabetic kidney disease. It is a supportive therapy that helps manage the symptoms and maintain the overall health of individuals with advanced kidney disease.

2. Methods: a. As I written in the previous review, you ARE doing an intervention – you are describing your intervention with humanistic nursing compared to a control group with regular nursing. Obviously this is an intervention that you assess its outcomes. Even if it's a retrospective study – you have two groups (intervention and control), and you should state how patients were entered into each group (was it by randomization, by nursing choice, by the month in the year, or else). In addition, how can you make sure nurses were not humanistic to the patients in the control group?

In the original article, we have added:

To implement random allocation, we used a random number generator or statistical software to randomly assign patients to different groups.

Humanistic nursing is not a very subjective behavior, we have systematically trained the nurses and added a lot of details on the basis of ordinary nursing, as shown below:

Study clusters: Humanized nursing was implemented on the basis of the control cluster, and all nursing staff were trained before implementation to enhance their own perception of humanized nursing, and patient-centered nursing was always achieved in nursing, and the measures included: (1) Health education: active communication with patients, health education could be conducted in the form of health knowledge lectures, one-on-one education, and WeChat video push, including methods, processes, precautions, and effectiveness, and the advantages of humanized nursing were listed to enhance patient confidence; (2) Psychological counseling: communication with patients with mild tone, understanding their genuine emotions, and

guiding patients to actively name their concerns, and targeted counseling was given for negative emotional causes, including cognitive therapy, attention transfer method, music relaxation therapy, and emotional catharsis method; And fresh green plants were placed indoors to relax the patient 's mood; (4) Diet and exercise individualized nursing: the patient' s condition, weight and self-metabolism were analyzed, the most appropriate daily food intake and exercise of the patient were calculated, and personalized guidance was made. Diet instructs patients to eat more foods containing calcium, protein-rich and fresh vegetables, low-sugar fruits, etc. ; (5) Obtain social support: communicate with patients' families, often stand at the patient's point of view to understand their behavior, and enhance the participation of family members in patient care, and strive to create a harmonious, warm, and relaxed family environment at home.

b. "Negative emotion Comparative" – the authors should elaborate in 1-3 lines on the mentioned scales they used (in the text of the manuscript).

Negative emotion Comparative: The Hamilton Anxiety Rating Scale(HAMA) and Hamilton Depression Rating Scale(HAMD) were used to assess the negative emotion[5]. HAMA is a standardized assessment tool used by healthcare professionals to quantify the severity of anxiety symptoms in individuals. It measures the presence and intensity of various anxiety-related symptoms, such as tension, apprehension, and insomnia. On the other hand, HAMD is a widely used instrument that evaluates the severity of depressive symptoms. It assesses factors like mood, guilt, sleep disturbances, and suicidal tendencies. Both scales provide valuable insights into the level of anxiety and depression experienced by individuals, aiding in diagnosis, treatment planning, and monitoring of progress over time. c. "Comparative of compliance rate" – this is a very general term, what exactly was measured to state if patients complied or not?

The compliance of patients is often judged based on the following criteria:

1. Complete compliance: The patient follows the doctor's advice throughout and actively cooperates with nursing.

2. Partial compliance: The patient may not cooperate partially but can complete nursing activities under the guidance of nursing staff.

3. Non-compliance: The patient completely refuses to cooperate with nursing.

Patient compliance is determined by observing and evaluating their interaction with the healthcare team and their adherence to treatment and nursing plans. However, it is important to consider individual differences, patient education level, and social support when assessing patient compliance.

d. "Comparative of complications" – which complications were included?

Common complications in hemodialysis include infection, catheter dysfunction, hypoglycemia, hypotension, and heart failure.

In the original article, we have added:

Intradialytic Hypotension (IDH) is common after dialysis. IDH, which can be caused by aggressive ultrafiltration due to weight gain during dialysis, can lead to myocardial stunning and cardiac arrhythmias, which are associated with an increased risk of death [9]. Obviously, kidney failure has a major impact on heart function. Studies have shown that more than half of deaths in patients with end-stage renal disease (ESRD) are due to cardiovascular disease, with arrhythmias and cardiac arrest accounting for 38 percent of deaths [10]. The incidence of ESRD has nearly doubled in the past 20 years. Infection is the second leading cause of death in this patient population, and vascular access-associated infection is the most common identifiable source of infection in hemodialysis (HD) patients [11]. The quality of vascular access is the most important factor to determine the efficacy of dialysis treatment. Vascular lumen stenosis can lead to increased risk of thrombosis, catheter dysfunction and adverse effects on blood flow [12]. Case studies have shown that glucose is transferred from the dialysate into the blood during dialysis and reactive hypoglycemia occurs after the end of dialysis. Persistent hypoglycemia can lead to permanent brain damage[13]. Therefore, monitoring the above complications is of great significance for evaluating the efficacy of dialysis.

e. The authors should add 1-3 lines on the SF-36 scale they used for evaluation of life (?).

The SF-36 scale is a widely used questionnaire for evaluating the quality of life. It consists of 36 items that assess various aspects of physical and mental health. The questionnaire covers eight domains: physical functioning, role limitations due to physical health, bodily pain, general health perceptions, vitality, social functioning, role limitations due to emotional problems, and mental health. These domains provide a comprehensive overview of an individual's well-being and can be used to measure the impact of interventions or conditions on their quality of life. The SF-36 scale has been extensively validated and is considered a reliable tool for assessing healthrelated quality of life.

3. Discussion – generally, I really don't think the authors could indicate on any connection between their nursing method and improved renal function. They did not perform any multivariate regression to account for other comorbidities or different dialysis plan between the groups. It is obvious that in patients under dialysis, the Scr has only mild effect on prognosis and does not really indicate on renal function. The need of more dialysis sessions, phosphor and calcium levels, and daily urinary output are far more relevant indicators for renal function which the authors did not evaluate.

Reply: It has been shown in the literature that inflammation and oxidative stress in patients with chronic kidney disease play an influential role. Therefore, it can be inferred that nursing intervention can reduce anxiety and depression in patients, thus affecting inflammation and renal function and blood creatinine level. The number of dialysis, phosphorus and calcium levels, and daily urine volume were not taken into account, which is one of the limitations of our article. Future studies will take these factors into account.

In the original article, we have added:

Diabetic nephropathy is a chronic kidney disease. Studies have shown that inflammation and depression have a two-way connection between people with chronic disease[25]. In chronic kidney disease, the increase in anxiety susceptibility may be associated with the inflammatory process of the toxin, the increase of oxidative stress, brain microvascular damage and the participation of the renin-angiotensin system[26]. So we can speculate that after nursing interventions, the patient's anxiety and depression were relieved. This affects the function of inflammation and kidney function, which affects the level of blood creatinine.