Systematic Nursing Intervention Effectively Controls The Blood Glucose Level And Improves The Adverse Psychological State of Patients With Diabetic Nephropathy

Honghua Lu[a], Liping Xiao[b], Xiaolan Liu[c*]

Abstract

Objective: To inquire into the application value of systematic nursing intervention in diabetic nephropathy (DN).

Methods: One hundred and nineteen patients with DN from January 2017 to July 2019 were selected and stochastically assigned into group A and group B. Among them, 55 cases in group A received routine nursing, while 64 cases in group B received systematic nursing intervention on the basis of group A. The blood glucose (BG) index levels and adverse psychological state of patients before and after nursing were observed.

Results: Although no evident differences were observed before nursing, the BG index levels and adverse psychological state meliorated notably after nursing, and the improvement was better in group B than in group A.

Conclusion: Systematic nursing intervention for DN can effectively control the BG level of patients and mitigate their adverse psychological state.

Keywords: systematic nursing, diabetic nephropathy, blood glucose level, adverse psychological state

Introduction

Diabetes, a persistent hyperglycemia, is the most common life-threatening disease in the world (Wojciechowska et al., 2016). The most common forms are type 1 diabetes and type 2 diabetes (Schmidt, 2016), among which the former is an autoimmune disease that causes the destruction of islet β cells, while the latter is mainly triggered by a progressive impairment of glucose regulation caused by poor pancreatic function of islet β cells and insulin resistance(Blair, 2016). The resulting hyperglycemia interferes with hemodynamics and metabolic homeostasis, and the long-term imbalance of microenvironment promotes the development of diffuse cellular abnormalities. As a result, many patients develop serious complications, the most serious of which is extensive vascular dysfunction. Given that the kidneys are highly sensitive to hemodynamic and metabolic changes, these organs are vulnerable

targets in a diabetic environment (Magee et al., 2017). Diabetic nephropathy (DN) is defined as the microvascular complication of the kidney caused by diabetes, which is characterized by progressive loss of proteinuria and renal function (Zhang et al., 1992; Loannou, 2016). It has a high prevalence rate, with approximately 30-40% of diabetics developing DN (Umanath and Lewis, 2018), and it is also associated with high medical costs and global deterioration of cardiovascular diseases (Meza et al., 2017). Due to the aging of the population, the rising prevalence of chronic diseases and frequently-occurring diseases, people's sensitivity and demand for nursing care have increased (Woo et al., 2017). On the other hand, with the increasing demand for medical services, the effective use of labor force is crucial to ensure the provision of high-quality and cost-effective medical services (Ozcan et al., 1995). Systematic nursing is a patient-centered nursing model and a social psychological treatment method, which can identify patients' personality according to their attitudes and nursing habits (Nyborg et al., 2018). Studies have shown that this patient-centered nursing intervention model can effectively meliorate the prognosis of patients,

[a, b] *Department of Nephrology, Ganzhou People's Hospital, Ganzhou 341000, Jiangxi Province, China.*
[c]*Department of Intensive Medicine, Ganzhou People's Hospital, Ganzhou 341000, Jiangxi Province, China.*
**Corresponding Author: Xiaolan Liu*
Email: Liuxiaolan0803@163.com

reduce re-hospitalization and reduce the global healthcare burden (Chew et al., 2019). However, there is little research on systematic nursing in DN, so this study explores the influence of systematic nursing intervention on DN patients.

1 Materials and methods
1.1 General information

This study has been informed and signed by patients and their families, and approved by the Ethics Committee of our hospital. This study selected 119 patients with DN treated in our hospital from January 2017 to July 2019, including 55 cases in group A who received routine nursing care, and 64 cases in group B who received systematic nursing intervention on the basis of group A. All the enrolled patients met the diagnostic criteria of DN (Qi et al., 2017; Dunstan et al., 2017; Jokelainen et al., 2019). on the contrary, patients with consciousness disorders and severe cardiac or renal insufficiency were excluded, as well as those with severe hematologic disease.

1.2 Nursing methods

Group A received routine nursing, which mainly included nutritional intervention for patients as instructed by doctors, routine health education and behavioral guidance, advice on matters needing attention, and close observation of vital signs.
Group B received systematic nursing intervention on the basis of group A, which mainly covered the following dimensions:
(1) Knowledge guidance: Due to the lack of knowledge about the disease, patients are likely to have bad emotions and affect the treatment. Therefore, the nursing staff first formulated a reasonable knowledge popularization plan according to the patient's situation and knowledge acceptance degree, and introduced the disease to patients and their families, so that they could get a preliminary understanding of diseases and reduce their psychological burden.
(2) Psychological intervention: In addition to lightening the psychological burden by making patients simply understand the disease knowledge, the nursing staff also communicated with patients frequently to understand their needs, respected their preferences, and explained successful cases, so as to enhance their confidence in treatment. The nursing staff also eased the patient's tension by means of playing music or movies. Besides, the psychological status of patients was evaluated regularly, and the nursing plan was revised according to their different psychological status.
(3) Dietary guidance: The nursing staff developed dietary plans according to patients' conditions and preferences, formulated nutrient-rich dietary collocation, and instructed patients to eat food with low salt, low fat and low protein.
(4) Medication intervention: The nursing staff instructed patients to use insulin to avoid hypoglycemia, and told the patients strictly follow the doctor's advice instead of arbitrarily adding or decreasing drugs or stopping drugs. In addition, patients were informed of the type of insulin and the timing of insulin injection, the precautions such as the injection site should be rotated, the same site should not be injected continuously and vigorous exercise after injection should be avoided, as well as the manifestation of hypoglycemia and coping methods.
(5) Exercise intervention: Patients were encouraged to take regular and simple exercise according to their own conditions, such as walking and playing Tai Chi, so as to enhance their physical fitness. When instructing patients to exercise, the patients should do within their capabilities, combine work with rest, and exercise gradually and persistently. The obese patients were urged to reduce body mass and increase islet sensitivity. Also, patients were encouraged to to participate in recreational activities properly, so as to distract attention and avoid excessive stress due to illness.

1.3 Outcome measures

Self-rating anxiety scale (SAS) (Dunstan et al., 2017) and self-rating depression scale (SDS) (Jokelainen et al., 2019) were utilized for anxiety and depression evaluation of patients, and the scores were directly proportional to the anxiety and depression. Blood glucose (BG) indexes (fasting blood glucose (FBG), serum creatinine (Scr) and blood urea nitrogen (BUN)) were measured pre- and post-nursing. A hospital self-made questionnaire was utilized to observe the compliance of patients in the two groups. The score had a maximum of 100 points covering compliance (> 90), basic compliance (60-90) and non-compliance (< 60). The total compliance rate = (compliance+basic compliance)/total number of cases. The quality of life (QOL; physical function, vitality, social function and material function) of patients after nursing was observed by referring to the Short-Form 36 Item Health Survey (SF-36)(Lins et al., 2016). The full score was 100, and a higher score indicated a better QOL. Patients' nursing satisfaction was assessed by the self-made satisfaction scale. With a total score of 100 points, ≥80 was deemed as satisfied, 70-80 as relatively satisfied, 60-70 as generally satisfied, and ≤59 as dissatisfied. Total satisfaction = (total number of cases - number of dissatisfied cases) / total number of cases ×100%

2 Statistical methods

SPSS 21.0 (SPSS, Inc., Chicago, IL, USA) was used for statistical analysis. The measurement data were measured by T-test, verified by paired t-test pre- and post-nursing, and represented by mean ± standard deviation (x±sd). The counting data were analyzed by Chi-square test and described as percentage (%). When $p < 0.05$, the difference was statistically significant.

3 Results

3.1 Comparison of general data between two groups of patients

No statistically significant difference was observed in general data including gender, age, personal data and living conditions between the two groups ($p > 0.05$). **Table 1**

Table 1. **Comparison of general data between the two groups (n (%))** （ $\overline{x}$±sd）

Classification	Group A (n=55)	Group B (n=64)	t/χ^2 value	P value
Gender			0.009	0.921
Male	34（61.82）	39（60.94）		
Female	21（38.18）	25 (39.06)		
Age (years old)	67.37±6.29	66.53±6.53	0.711	0.478
BMI (kg/m^2)	21.59±3.98	22.18±3.24	0.891	0.374
Height (cm)	174.58±5.11	173.86±5.86	0.708	0.480
Marital status			0.003	0.954
Married	41 (74.55)	48 (75.00)		
Others	14 (25.45)	16 (25.00)		
Residence			0.001	0.965
Rural	26 (47.27)	30 (46.88)		
Urban	29 (52.73)	34 (53.12)		
Education level			0.036	0.981
Junior high school or below	16 (29.09)	19 (29.69)		
Senior high school or technical secondary school	25 (45.45)	28 (43.75)		
Junior college or above	14 (25.45)	17 (26.56)		
Ethnicity			1.417	0.234
Han	49 (89.09)	52 (81.25)		
Ethnic minorities	6 (10.91)	12 (18.75)		
Monthly household income			0.671	0.714
<3000	7 (12.73)	11 (17.19)		
3000-5000	32 (58.18)	33 (51.56)		
>5000	16 (29.09)	20 (31.25)		
Primary disease			0.722	0.697
Type 1 diabetes mellitus	11 (20.00)	17 (26.56)		
Type 2 diabetes mellitus	36 (65.45)	38 (59.38)		
Others	8 (14.55)	9 (14.06)		
Course of diabetes mellitus (year)			0.104	0.949
<5	15 (27.27)	19 (29.69)		
5-10	29 (52.73)	32 (50.00)		
>10	11 (20.00)	13 (20.31)		
Blood glucose (mmol/L)			0.991	0.319
3.9-6.1	33 (60.00)	44 (68.75)		
>6.1	22 (40.00)	20 (31.25)		

3.2 BG indexes pre- and post-nursing

The FBG in group A pre- and post-nursing was (12.86±2.54) mmol/L/l and (8.49±2.91) mmol/l respectively, while that in group B pre- and post-nursing was (12.94±2.88) mmol/L/l and (5.97±1.17) mmol/l respectively. The Scr in group A pre- and post-nursing was (151.72±28.48) μmol/l and (127.41±22.56) μmol/l, respectively, while that in group B pre- and post-nursing was (154.46±30.71) μmol/l and (104.16±16.33) μmol/l, respectively. The BUN in group A pre- and post-nursing was (13.41±2.15) mmol/L/l and (10.13±1.45) mmol/l, respectively, while that in group B pre- and post-

nursing was (13.57±2.11) mmol/L/l and (6.44±1.28) mmol/l, respectively. After nursing, the blood glucose indexes of both groups decreased, and the blood glucose indexes were lower in group B than in group A (p < 0.05). **Figure 1**
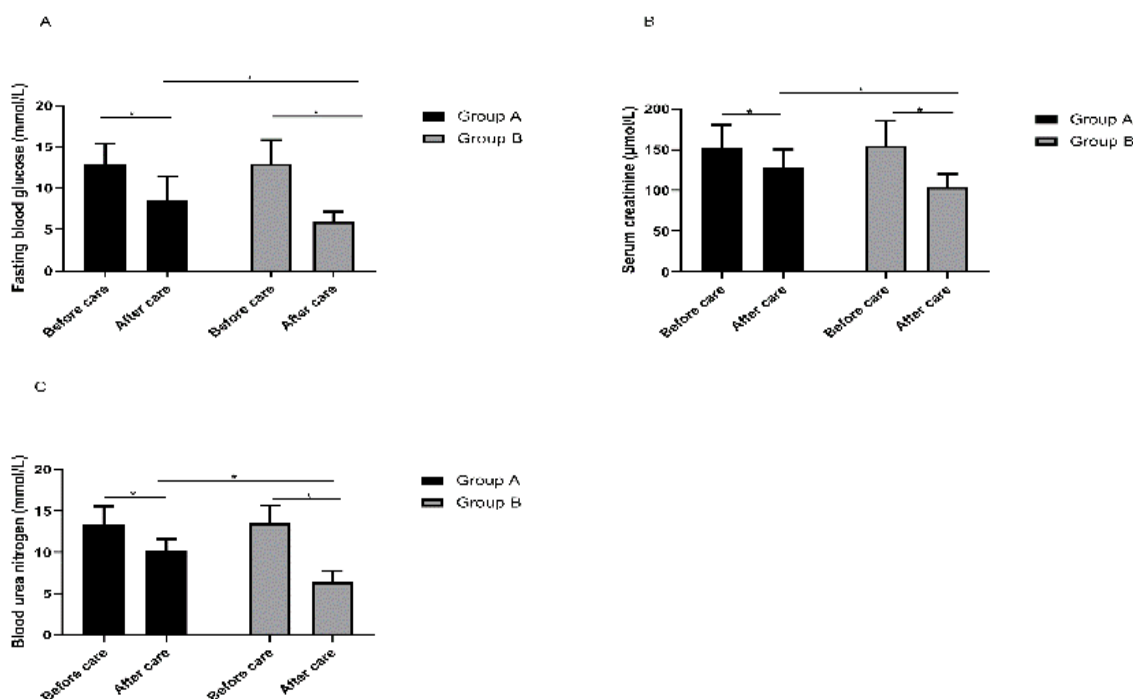

Figure 1. **Blood glucose indexes pre- and post-nursing in the two groups**

The blood glucose indexes differ insignificantly between the two groups before nursing (p > 0.05), but the indexes decrease in both groups after nursing, and the blood glucose indexes in group B are lower than those in group A (p < 0.05). (A) Fasting blood glucose pre- and post-nursing in the two groups (B) Serum creatinine pre- and post-nursing in the two groups (C) Blood urea nitrogen pre- and post-nursing in the two groups. Note: *p < 0.05

3.3 Comparison of adverse reactions between the two groups

The total incidence of adverse reactions in group B (9.38%) was dramatically lower than that in group A (27.27%) (p < 0.05). **Table 2**

Table 2. **Comparison of adverse reactions between the two groups (n(%))**

Adverse reactions	Group A (n=55)	Group B (n=64)	χ2 value	P value
Infection	2 (3.64)	1 (1.56)	-	-
Dizziness	5 (9.09)	2 (3.13)	-	-
Dry mouth	2 (3.64)	1 (1.56)	-	-
Hypoglycemia	3 (5.45)	0 (0.00)	-	-
Hypotension	2 (3.64)	1 (1.56)	-	-
Disequilibrium syndrome	1 (1.82)	0 (0.00)	-	-
Total incidence	15 (27.27)	6 (9.38)	6.520	0.010

3.4 Anxiety of patients in the two groups pre- and post-nursing

The SAS scores in group A pre- and post-nursing were (29.13±3.58) and (24.54±2.81) respectively, while those in group B pre- and post-nursing were (28.67±3.12) and (19.41±2.06) respectively. There was no difference in the SAS score before nursing between the two groups (p > 0.05), but the score after nursing decreased in both groups, and the score in group B was lower than that in group A (p < 0.05). **Figure 2**
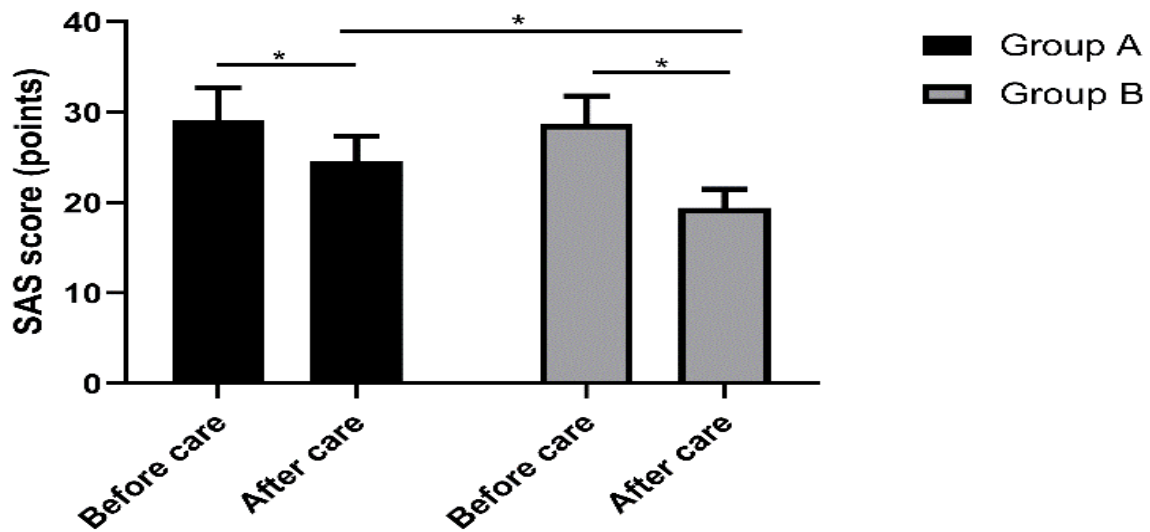
Figure 2. **Anxiety of patients in the two groups pre- and post-nursing**

There is no difference in the SAS score between the two groups before nursing (p > 0.05), but after nursing, the score decreases in both groups and the score in group B is lower than that in group A (p < 0.05). Note: * p < 0.05.

3.5 Depression of patients in the two groups pre- and post-nursing

The SDS scores of patients in group A pre- and post-nursing were (32.84±4.11) and (25.52±3.72) respectively, and those in group B pre- and post-nursing were (33.12±3.74) and (21.09±2.18) respectively. The SDS score did not differ remarkably between groups A and B before nursing (p > 0.05), but after nursing, the score decreased in both groups, and the decrease was more significant in group B than in group A (p < 0.05). **Figure 3**
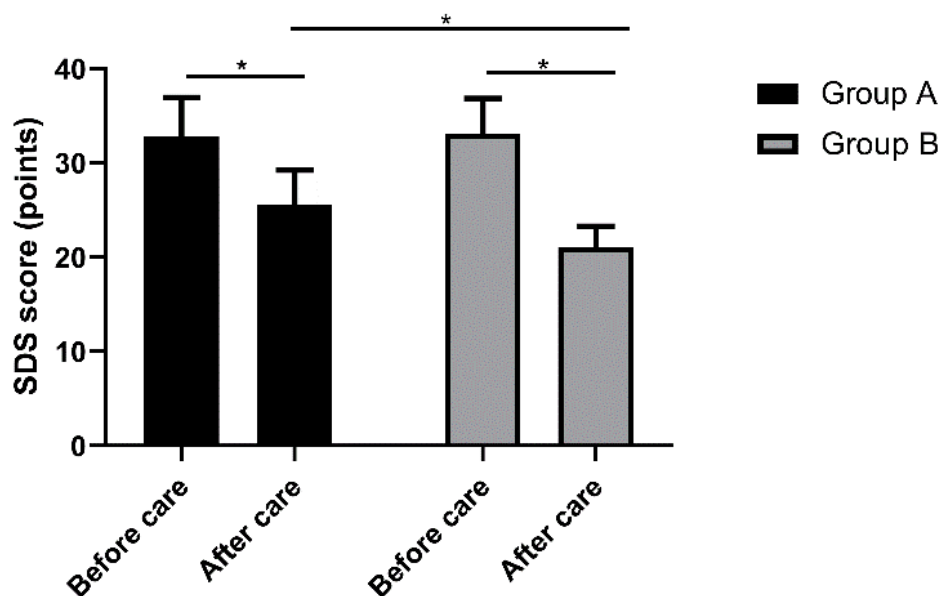

Figure 3. **Depression of patients in the two groups pre- and post-nursing**

There is no difference in the SDS score between the two groups before nursing (p > 0.05), but after nursing, the score reduces in both groups, and the score in group B is lower than that in group A (p < 0.05). Note: * p < 0.05.

3.6 Comparison of QOL between the two groups after nursing

Group B presented higher QOL scores (physical function, vitality, social function and material function) than group A after nursing intervention (p < 0.05). **Figure 4**
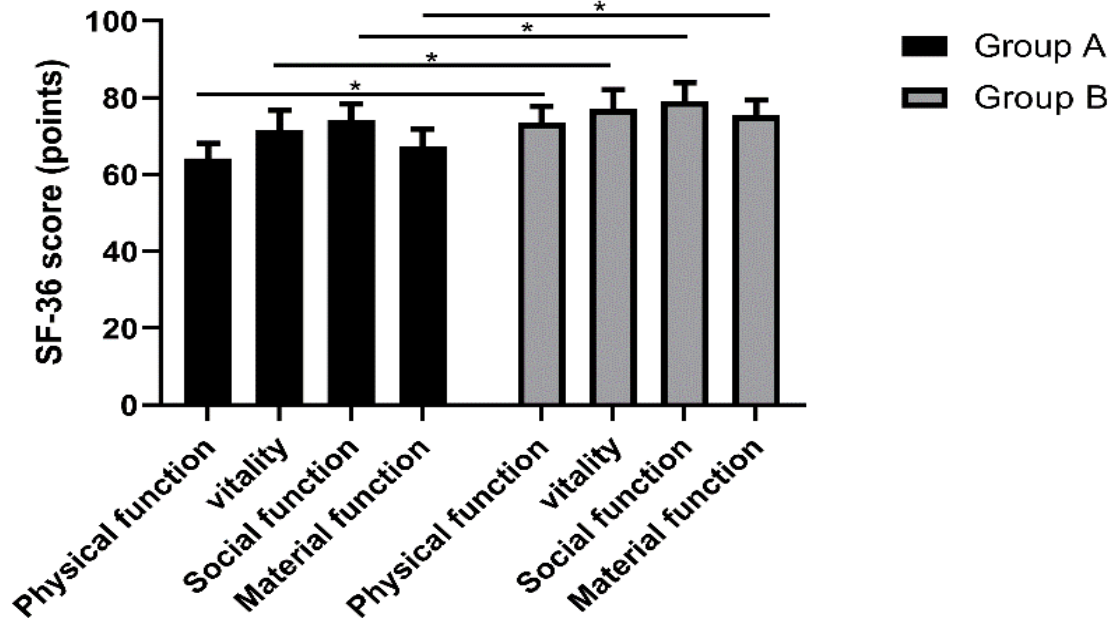

Figure 4. **Comparison of quality of life between the two groups after nursing**

After nursing, the scores of qualities of life (physical function, vitality, social function and material function) in group B were higher than those in group A (p < 0.05). Note: * p < 0.05.

3.7 Comparison of compliance between the two groups

The total compliance rates of group A and group B after nursing were 61.82% and 87.50%, respectively. The total compliance in group B was significantly higher than that in group A (p < 0.05). **Table 3**

Table 3. **Comparison of compliance between two groups (n (%))**

Compliance	Group A (n=55)	Group B (n=64)	χ^2 value	P value
Compliance	15 (27.27)	33 (51.56)	-	-
Basic compliance	19 (34.55)	23 (35.94)	-	-
Non-compliance	21 (38.18)	8 (12.50)	-	-
Total compliance rate	34 (61.82)	56 (87.50)	10.591	0.001

3.8 Comparison of nursing satisfaction between the two groups

The total satisfaction of group A and group B after nursing was 74.55%, which was notably lower than 92.19% of group A (p < 0.05). **Table 4**

Table 4. **Comparison of nursing satisfaction between the two groups (n (%))**

Satisfaction	Group A (n=55)	Group B (n=64)	χ^2 value	P value
Satisfied	19 (34.55)	38 (59.38)	-	-
Relatively satisfied	12 (21.82)	14 (21.88)	-	-
Generally satisfied	10 (18.18)	7 (10.94)	-	-
Dissatisfied	14 (25.45)	5 (7.81)	-	-
Overall satisfaction	41 (74.55)	59 (92.19)	6.862	0.008

Discussion

Nephropathy is a major microvascular

complication of diabetes, which is triggered by intraglomerular hypertension and ultrafiltration caused by hyperglycemia, insulin resistance and abnormal hemodynamics (Bose et al., 2018). It is characterized by hypertrophy of the glomerulus, reduced proteinuria/glomerular filtration, and renal fibrosis, resulting in loss of renal function (Lu et al., 2018). DN not only brings a heavy burden to society, but also seriously affects the QOL of patients (Xiong et al., 2018). Studies have shown that patients with diabetes have a high incidence of depression and anxiety during the illness, which may worsen the overall QOL of the patients (Khan et al., 2019). Therefore, during nursing, we always paid attention to the patient's psychological state and explained the disease knowledge, and timely ease the negative emotions of patients, which was the reason behind the better relieved anxiety and depression in patients with systematic nursing. Evidence has demonstrated that this patient-centered nursing model, which respects and responds to patients' experience, needs, preferences and values, can contribute to improving the efficiency and effect of medical services and is expected to improve patients' physical and mental health (Schouten et al., 2019). Therefore, nurses should actively inquire about the experience and needs of patients in the process of nursing intervention, and focus on the needs and preferences of patients in order to achieve a good match between patients and nurses, so as to bolster the comprehensiveness and efficiency of nursing intervention.

Systematic nursing has always been the core of nursing practice and unique nursing knowledge (Ortiz, 2018), which encourages medical service providers to respect patients' preferences and give them more autonomy in healthcare decision-making (Boggiano et al., 2017). It also emphasizes interaction with patients and their families, cultural ability, communication and joint decision-making (Odle, 2019). Nursing staff have the potential to improve patients' self-care (Buck et al., 2017), so this study managed patients from various aspects such as knowledge popularization, psychological intervention and dietary intervention, in a combined effort to bolster patients' treatment compliance and thus achieve the purpose of improving treatment efficacy. And our results also identified that patients with systematic nursing were more compliant and more willing to follow medical advice. Moreover, patients with systematic nursing showed better blood glucose control. We speculated that the reason for this result may be that systematic nursing has enabled patients to obtain more emotional support, which in turn better enhance patients' self-care confidence (Fivecoat et al., 2018), leading to patients' compliance with treatment arrangements and timely taking of medicine, thus improving their overall physical condition. What's more, the combined intervention of diet control, proper exercise and drug control also improved the overall therapeutic effect. Also, literature has revealed that specialized nursing intervention can save lives, reduce disability and shorten hospital stay, and is usually associated with improved patient outcomes (Theofanidis and Gibbon, 2016), which suggests that systematic nursing can achieve the best patient outcome. Finally, our results also indicated that patients who received systematic nursing had a better QOL. Researches have shown that special nursing intervention ameliorates patients' satisfaction and QOL (Saab et al., 2017), and that patient-centered nursing intervention model can effectively reduce patients' anxiety and depression and improve their QOL (Kim et al., 2017). This may be because systematic holistic nursing interventions promote collaborative learning and skill development between caregivers and patients, thereby improving the QOL of patients and ensuring the sustainability of the impact of behavioral problems.

In conclusion, systematic nursing intervention can effectively control the BG level and ease the adverse psychological state of DN patients.

References

[1] Blair M (2016). Diabetes Mellitus Review. *Urol Nurs*. 36(1):27-36.

[2] Boggiano VL, Wu Y, Bruce JS, Merrell SB, Schillinger E (2017). Patient-Centered Care Challenges and Surprises:Through the Clerkship Students' Eyes. *Fam Med*. 49(1):57-61.

[3] Bose M, Almas S, Prabhakar S (2017). Wnt signaling and podocyte dysfunction in diabetic nephropathy. *J Investig Med*. 65(8):1093-1101. doi:10.1136/jim-2017-000456

[4] Buck HG, Stromberg A, Chung ML (2018). A systematic review of heart failure dyadic self-care interventions focusing on intervention components, contexts, and outcomes. *Int J Nurs* Stud.77:232-242. doi: 10.1016/j.ijnurstu.2017.10.007

[5] Chew HSJ, Sim KLD, Cao X, Chair SY (2019). Motivation, Challenges and Self-Regulation in Heart Failure Self-Care:a Theory-Driven Qualitative Study. *Int J Behav Med*.26(5):474-485. doi:10.1007/s12529-019-09798-z

[6] Dunstan DA, Scott N, Todd AK (2017). Screening for anxiety and depression:reassessing the utility of the Zung scales. *BMC Psychiatry*. 17(1):329. Published 2017 Sep 8. doi:10.1186/s12888-017-1489-6

[7] Fivecoat HC, Sayers SL, Riegel B (2018). Social support predicts self-care confidence in patients with heart failure. *Eur J Cardiovasc Nurs*. 17(7):598-604. doi:10.1177/1474515118762800.

[8] Jokelainen J, Timonen M, Keinänen-Kiukaanniemi S, Härkönen P, Jurvelin H, Suija K (2019). Validation of the Zung self-rating depression scale (SDS) in older adults. *Scand J Prim Health Care*.37(3):353-357. doi:10.1080/02813432.2019.1639923

[9] Khan P, Qayyum N, Malik F, Khan T, Khan M, Tahir A (2019). Incidence of Anxiety and Depression Among Patients with Type 2 Diabetes and the Predicting Factors. *Cureus*. 11(3): e4254. Published 2019 Mar 14. doi:10.7759/cureus.4254

[10] Kim SK, Park M (2017). Effectiveness of person-centered care on people with dementia:a systematic review and meta-analysis. *Clin Interv Aging*. 12:381-397. Published 2017 Feb 17. doi:10.2147/CIA.S117637.

[11] Loannou K (2017). Diabetic nephropathy:is it always there? Assumptions, weaknesses and pitfalls in the diagnosis. *Hormones (Athens)*. 16(4):351-361. doi:10.14310/horm.2002.1755.

[12] Lins L, Carvalho FM (2016). SF-36 total score as a single measure of health-related quality of life:Scoping review. *SAGE Open Med*. 4:2050312116671725. Published 2016 Oct 4. doi:10.1177/2050312116671725

[13] Lu Z, Liu N, Wang F (2017). Epigenetic Regulations in Diabetic Nephropathy. *J Diabetes Res*. 2017:7805058. doi:10.1155/2017/7805058

[14] Magee C, Grieve DJ, Watson CJ, Brazil DP (2017). Diabetic Nephropathy:a Tangled Web to Unweave. *Cardiovasc Drugs Ther*. 31(5-6):579-592. doi:10.1007/s10557-017-6755-9

[15] Meza Letelier CE, San Martín Ojeda CA, Ruiz Provoste JJ, Frugone Zaror CJ (2017). Fisiopatología de la nefropatía diabética:una revisión de la literatura (Pathophysiology of diabetic nephropathy:a literature review). *Medwave*. 17(1): e6839. Published 2017 Jan 12. doi:10.5867/medwave.2017.01.6839.

[16] Nyborg VN, Hvalvik S, McCormack B (2018). Understanding care in the past to develop caring science of the future:a historical methodological approach. *Scand J Caring Sci*. 32(4):1485-1491. doi:10.1111/scs.12576

[17] Ozcan S, Taranto Y, Hornby P (1995). Shaping the health future in Turkey:a new role for human resource planning. *Int J Health Plann Manage*. 10(4):305-319. doi:10.1002/hpm.4740100406.

[18] Ortiz MR (2018). Patient-Centered Care:Nursing Knowledge and Policy. *Nurs Sci Q*. 31(3):291-295. doi:10.1177/0894318418774906

[19] Odle TG (2019). Patient-Centered Care in Breast Imaging. *Radiol Technol*. 90(3):259M-277M.

[20] Qi C, Mao X, Zhang Z, Wu H (2017). Classification and Differential Diagnosis of Diabetic Nephropathy. *J Diabetes Res*.2017:8637138. doi:10.1155/2017/8637138

[21] Saab MM, Drennan J, Cornally N (2019). Impact of a compassionate care leadership programme. *Br J Nurs*. ;28(11):708-714. doi:10.12968/bjon.2019.28.11.708

[22] Schmidt AM (2018). Highlighting Diabetes Mellitus: The Epidemic Continues. *Arterioscler Thromb Vasc Biol*. 38(1): e1-e8. doi:10.1161/ATVBAHA.117.310221

[23] Schouten B, Avau B, Bekkering GTE (2019). Systematic screening and assessment of psychosocial well-being and care needs of people with cancer. *Cochrane Database Syst Rev*. 3(3):CD012387. Published 2019 Mar 26. doi: 10.1002/14651858.CD012387.pub2

[24] Theofanidis D, Gibbon B (2016). Nursing interventions in stroke care delivery:An evidence-based clinical review. *J Vasc Nurs*. 34(4):144-151. doi: 10.1016/j.jvn.2016.07.001.

[25] Umanath K, Lewis JB (2018). Update on Diabetic Nephropathy:Core Curriculum 2018. *Am J Kidney Dis*. 71(6):884-895. doi: 10.1053/j.ajkd.2017.10.026.

[26] Wojciechowska J, Krajewski W, Bolanowski M, Kręcicki T, Zatoński T (2016). Diabetes and Cancer: a Review of Current Knowledge. *Exp Clin Endocrinol Diabetes*.124(5):263-275. doi:10.1055/s-0042-100910

[27] Woo BFY, Lee JXY, Tam WWS (2017). The impact of the advanced practice nursing role on quality of care, clinical outcomes, patient satisfaction, and cost in the emergency and critical care settings:a systematic review. *Hum Resour Health*. 15(1):63. Published 2017 Sep 11. doi:10.1186/s12960-017-0237-9

[28] Xiong Y, Zhou L (2019). The Signaling of Cellular Senescence in Diabetic Nephropathy. *Oxid Med Cell Longev*.2019:7495629. Published 2019 Oct 3. doi:10.1155/2019/7495629

[29] Zhang J, Liu J, Qin X (1992). Advances in early biomarkers of diabetic nephropathy. *Rev Assoc Med Bras* .2018;64(1):85-92. doi:10.1590/1806-9282.64.01.85.