

## Original Article

# KTH integrated nursing intervention can improve the treatment compliance and quality of life of elderly diabetic patients

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**Abstract:** Objective: To explore the influence of KTH integrated nursing intervention on the therapeutic compliance and quality of life of elderly diabetic patients. Method: From January 2018 to December 2019, 120 elderly patients with diabetes admitted to our hospital were recruited for this study and divided into a control group (CG) (58 cases) and a research group (RG) (62 cases). The patients in the CG were treated with routine nursing intervention, and the patients in the RG received KTH integrated nursing intervention. The blood glucose index levels, treatment compliance, self-care ability scores (ESCA), self-efficacy scores (GSES), self-rating anxiety scale (SAS) scores, self-rating depression scale (SDS) scores, life quality scores (SF-36) and satisfaction with the nursing were analyzed. Results: After the nursing intervention, the fasting blood glucose and the blood glucose levels two hours after meals and the glycosylated hemoglobin, and SAS and SDS scores in the RG were significantly lower than they were in the CG, and the treatment compliance rate, the ESCA and GSES scores, the SF-36 scores, and the satisfaction with the nursing were significantly higher than they were in the CG. Conclusion: KTH integrated nursing intervention can ameliorate the therapeutic compliance and quality of life in elderly patients with diabetes.

**Keywords:** Elderly patients with diabetes, KTH integrated nursing, treatment compliance, quality of life

## Introduction

Diabetes mellitus is a metabolic disease characterized by hyperglycemia. Due to insufficient secretions of insulin and islet dysfunction, the patient presents with a chronic and gradual increase in blood glucose, which becomes a chronic lifelong disease [1]. The main causes of the disease are environmental and genetic factors, which have a significant genetic tendency [2]. Diabetes mainly includes type 1 diabetes mellitus, type 2 diabetes mellitus, and gestational diabetes mellitus, with type 2 as the main type [3]. The clinical manifestations are typically “a little more than three disease” symptoms, including fatigue, weakness, obesity, and so on [4]. Patients are clinically diagnosed with diabetes according to the criteria of fasting blood sugar  $\geq 7.0$  mmol/L or blood sugar  $\geq 11.1$  mmol/L after a meal for 2 hours [5]. At present, diabetes cannot be cured, so

comprehensive treatment is needed, which mainly includes five aspects: education of diabetic patients, dietary therapy, exercise treatment, pharmacotherapy, and blood sugar monitoring [6-8]. Senile diabetes is defined by the patient's age, and diabetic patients over 60 years old are usually referred to as senile diabetes [9]. With the change in modern people's diets and lifestyle, the aging population is increasing, and the incidence of senile diabetes is increasing yearly [10]. Because elderly patients with diabetes are old, their body function is gradually declining. The lack of knowledge related to diabetes, the long course of the disease, recurrent disease, and other factors lead to poor treatment compliance, and patients' conditions cannot be stably controlled, seriously affecting their quality of life [11]. Therefore, it is of great significance to explore a safe and effective nursing intervention model for elderly patients with diabetes.

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With the development of nursing and the increasing needs of patients', the conventional nursing mode has been far from successful at meeting the requirements of clinical nursing [12]. KTH integrated nursing is a new nursing model which combines the KABP Model, the TTM model, and the HBM model to implement health education [13]. KTH integrated nursing is patient-centered and mobilizes the active participation of family members, so as to improve the level of knowledge, attitude and behaviors of patients and further improve their self-management abilities. At the same time, medical staff make individual behavior plans and urge patients to consciously engage in healthy behaviors, so as to establish a better lifestyle, strengthen their confidence in the treatment, improve their treatment compliance, ameliorate their quality of life, and improve their prognose through the nursing process [14-16]. Previous studies have shown that KTH integrated nursing intervention can improve patients' health knowledge and self-management abilities, thus improving treatment compliance and quality of life in patients with chronic diseases [17, 18]. However, there are few published studies on KTH integrated nursing intervention for elderly patients with diabetes.

In this study, the KTH integrated nursing model was applied to elderly patients with diabetes to investigate the influence of this model on their treatment compliance and quality of life.

### Materials and methods

#### *Baseline data*

From January 2018 to December 2019, 120 elderly patients with diabetes admitted to the First Affiliated Hospital of Suzhou University were recruited for the study and divided into the CG (58 cases) and the RG (62 cases) according to the nursing intervention mode each received. In the CG, the patients were treated with the routine nursing intervention mode, while the patients in the RG received the KTH integrated nursing intervention mode. In the CG, there were 32 men and 26 women, with a mean age of (78.20±3.05) years old, and ranging in age from 60 to 93 years old. In the RG, there were 35 men and 27 women, with

a mean age of (78.26±3.12) years old, ranging in age from 61 to 95 years old.

#### *Inclusion and exclusion criteria*

*Inclusion criteria:* (1) Patients who met the diagnostic criteria for diabetes established by WHO [19]. (2) Patients who were ≥ 60 years old. (3) Patients whose clinical data were complete.

This study was approved by the Ethics Committee of our hospital, and all the participants or their dependents were informed of the study and signed an informed consent form.

The exclusion criteria were as follows: (1) Patients who also suffered from severe diabetic complications. (2) Patients with physical dysfunction who needed to stay in bed for a long time. (3) Patients with a history of drug abuse and alcoholism. (4) Patients with malignant tumors and end-stage diseases. (5) Patients also suffering from severe organic diseases such as of the heart, liver, or kidneys. (6) Patients with cognitive impairments or language and hearing impairments. (7) Patients who also suffered from mental illness or who had a family history of mental illness. (8) Patients who quit the test midway.

#### *Nursing methods*

In the CG, the patients were treated with the routine nursing intervention, which included providing health education, regular blood glucose monitoring, medication guidance, basic life nursing, diet and exercise guidance programs, etc.

In the RG, the patients received KTH integrated nursing intervention mode in addition to the conventional nursing provided in the RG. The detailed methods were as follows:

(1) A KTH integrated nursing team was set up. All the members of the team received unified training and passed the examination before joining the team. The team members attended lectures given by professional diabetes experts and nurses with rich experience in specialized nursing. All the patients were assessed for their health education by the group leader, and scientific and reasonable health education plans and implementation

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strategies were formulated in strict accordance with KTH theory. At the same time, the effect of the implementation of the measures was assessed regularly, and the implementation effect was evaluated objectively.

(2) Implementation of KTH integrated health education. First of all, all the patients were evaluated comprehensively. Before the intervention, the patients' baseline data were obtained through interviews, including the patients' understanding of the disease, their health beliefs, family functions, medication compliance, and quality of life. Secondly, a diabetes health education manual was compiled scientifically and reasonably. According to the patient's cultural level, local living habits, diet, and other factors, a *Handbook of Health Knowledge of Elderly Diabetes* was compiled, which followed the principles of being easy to understand, illustrated, concise, and easy remember for elderly patients. The manual included diabetes pathogenesis, clinical manifestations, common complications, methods of blood glucose monitoring, objectives of blood glucose control, how to establish a healthy lifestyle, low-sugar diet, regular exercise, special coping measures, self-protection knowledge and the psychological adaptability of patients. Furthermore, health education about knowledge, attitude, and behaviors was carried out. According to the patients' previous living habits and study experiences, the group members divided the health education contents into different modules and explained them to the patients in a cyclic and step-by-step manner until they mastered them. The medical staff provided support and encouragement to the patients with an ideal control effect of their blood glucose, so as to improve the patients' confidence in their treatment. Patients with an ideal control effect of blood glucose were invited regularly to give their opinions, so as to enhance the patients' confidence in overcoming diseases. At the same time, the family members were instructed to urge the patients to establish better health behavior, so as to improve the treatment compliance of the patients. Finally, the individualized health education was carried out. ① Medical staff carried out one-to-one health education for patients, organized the patients to watch diabetes videos on a regular basis, focused on introducing the significance

of a reasonable diet, dispensed medication as prescribed by the doctors and scientific exercise to patients, so as to improve the patients' treatment compliance and cooperation. ② The medical staff provided healthy eating measurement tools to the patients, such as graduated food scales and salt spoons, so that they could scientifically control their food intake and weight every day. ③ The medical staff visited the patients regularly, understood their health behavior and urged them to establish and maintain good living habits. ④ According to each patient's sports interest and physical condition, the medical staff guided the patient to do the best exercises and to form the good habit of exercising regularly. ⑤ The medical staff focused on healthy lifestyles, encouraged the patients to quit smoking and limit the alcohol consumption, and asked family members to assist in monitoring them. ⑥ The medical staff regularly followed up with the patients and visited them at home to learn about their physical recovery, discuss medication habits with the patient's family members, summarize the factors affecting the patient's medication compliance, and develop scientific solutions.

### Outcome measures

(1) The blood glucose indexes (fasting blood glucose, blood glucose two hours after a meal, and glycosylated hemoglobin) were analyzed in the two groups.

(2) The patients' treatment compliance was analyzed in the two groups, including their drug therapy, diet therapy, blood glucose self-test therapy, and exercise therapy.

(3) Self-care ability scores: The self-care agency scale (ESCA) [20] was used to evaluate the self-nursing ability in both groups before and after the nursing intervention. The scale included four dimensions: self-nursing skills, self-care responsibility, self-concept, and health knowledge level, for a total of 43 items. The 5-point scoring method was used. The higher the score, the stronger the patient's self-nursing ability.

(4) Self-efficacy score: The general self-efficacy scale (GSES) [21] was used to evaluate the patients' self-efficacy in both groups before and after the nursing intervention. There were

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10 items, with 1-4 points for each item. The higher the score, the stronger the self-efficacy.

(5) SAS and SDS scores: SAS and SDS [22] were applied to evaluate the anxiety and depression of patients in the two groups before and after the nursing intervention. The total possible SAS scale score was 100 points. A score of 50-70 points indicated mild anxiety, 71-90 points indicated moderate anxiety, and a score > 90 points indicated severe anxiety. The higher the score, the more serious the anxiety. The total possible SDS scale score was 100 points. A score of 50-70 points indicated mild depression, 71-90 points indicated medium depression, and a score > 90 points indicated serious depression. The higher the score, the more serious the depression.

(6) Quality of life score: The SF-36 quality of life scale was used to evaluate the quality of life after the nursing intervention. The patients' quality of life was evaluated by administering the SF-36 scale [23], developed by American Medical Research Institute, which includes eight items: general health, physiological function, physiological role, bodily pain, life vitality, society function, emotional role and psychology health. The score of each item ranges from 0-100 points. The higher the score, the better the quality of life.

(7) Nursing satisfaction: Our self-made nursing satisfaction questionnaire was applied to evaluate the nursing satisfaction in both groups. There were 20 questions in the scoring content, and the patients were scored according to the nursing content of our hospital. Each question was worth 5 points, and a total score of < 70 indicated dissatisfied, 70-89 indicated satisfied, and  $\geq 90$  indicated great satisfaction. Satisfaction = (great satisfaction + satisfactory)/total cases  $\times 100\%$ .

### Statistical methods

SPSS25.0 (IBM Corp, Armonk, NY, USA) was used for statistical analysis. GraphPad Prism 7 was used to draw the figures. The counting data was represented by [n (%)]. chi-square tests were used to compare the counting data between groups. When the theoretical frequency in a chi-squared test was less than 5, a continuity correction chi-square test was used. The quantitative data was represented by the mean

$\pm$  standard deviation ( $\bar{x} \pm sd$ ). The measurement data between groups were compared using independent-samples t tests. Paired T tests were applied for the intra-group comparisons before and after the nursing. A difference was statistically significant when  $P < 0.05$ .

## Results

### Baseline data

There were no significant differences in the general clinical baseline data, such as gender, age, body mass index (BMI), course of disease, marriage, place of residence, nation, educational background, smoking history, drinking history, or hypertension history in the two groups ( $P > 0.05$ ) (**Table 1**).

### Comparison of the blood sugar indexes between the two groups

Before the nursing intervention, there were no significant differences in fasting blood sugar, blood sugar two hours after a meal, or glycosylated hemoglobin between the two groups ( $P > 0.05$ ). After the nursing intervention, the patients' fasting blood glucose, blood glucose two hours after a meal, and glycosylated hemoglobin were significantly decreased in the two groups, and the levels in the RG patients were significantly lower than they were in the CG ( $P < 0.05$ ) (**Figure 1**).

### Comparison of treatment compliance between the two groups

After the nursing intervention, the treatment compliance of the patients in the RG was significantly higher than it was in the CG ( $P < 0.05$ ) (**Table 2**).

### Comparison of the self-nursing ability scores between the two groups

Before the nursing intervention, there was no significant difference in the self-nursing skill, self-care responsibility, self-concept, or health knowledge level scores and the total self-nursing ability scores in both groups ( $P > 0.05$ ), but after the nursing the scores of the four dimensions and total self-care ability scores after the nursing intervention in both groups were significantly higher than they were before the intervention ( $P < 0.05$ ), and the scores in the

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**Table 1.** Comparison of the baseline data in both groups [n (%)] ( $\bar{x} \pm sd$ )

Classification	RG (n=62)	CG (n=58)	t/ $\chi^2$ value	P value
Gender			0.019	0.887
Male	35 (56.45)	32 (55.17)		
Female	27 (43.55)	26 (44.83)		
Age/years old	78.26 $\pm$ 3.12	78.20 $\pm$ 3.05	0.106	0.915
BMI (kg/m <sup>2</sup> )	24.13 $\pm$ 3.04	24.56 $\pm$ 3.25	0.748	0.455
Course of the disease (years)	9.49 $\pm$ 1.57	9.31 $\pm$ 1.23	0.695	0.487
Marriage			0.237	0.626
Married	48 (77.42)	47 (81.03)		
Unmarried or widowed	14 (22.58)	11 (18.97)		
Place of residence			0.137	0.710
City	36 (58.06)	35 (60.34)		
Rural	26 (41.94)	22 (37.93)		
Nation			0.350	0.553
Han nationality	51 (82.26)	50 (86.21)		
Minority nationality	11 (17.74)	8 (13.79)		
Educational background			0.391	0.531
$\geq$ high school	35 (56.45)	36 (62.07)		
< high school	27 (43.55)	22 (37.93)		
Smoking history			0.040	0.840
Yes	30 (48.39)	27 (46.55)		
No	32 (51.61)	31 (53.45)		
Drinking history			0.071	0.788
Yes	25 (40.32)	22 (37.93)		
No	37 (59.68)	36 (62.07)		
Hypertension history			0.176	0.674
Yes	48 (77.42)	43 (74.14)		
No	14 (22.58)	15 (25.86)		

scores in both groups ( $P > 0.05$ ). After the nursing intervention, the patients' SAS and SDS scores were significantly decreased in both groups ( $P < 0.05$ ), and the scores in the RG were significantly lower than they were in the CG ( $P < 0.05$ ) (**Figure 4**).

### *Comparison of the quality of life scores between the two groups*

After the nursing intervention, the quality of life scores of patients in the RG were significantly higher than they were in the CG ( $P < 0.05$ ) (**Figure 5**).

### *Comparison of the nursing satisfaction in both groups after the nursing intervention*

After the nursing intervention, the nursing satisfaction in the RG was 95.16%, and in the CG it was 72.41%. The nursing satisfaction of the patients in the RG was significantly higher than it was in the CG ( $P < 0.05$ ) (**Table 3**).

## Discussion

Senile diabetes is a common chronic disease in the elderly. Due to the economic development and the improvement of living standards, its incidence rate continues to increase [24]. Due to the degradation of physiological and organ functions, elderly diabetic patients have complicated diseases and a high incidence of complications, and most of them also suffer from other chronic diseases, resulting in a poor prognosis [25]. Elderly diabetes has seriously affected the quality of life and health of patients, and it has become a global public health problem [26]. At present, controlling blood sugar and improving the quality of life are the two major prevention and treatment principles of the International Diabetes Federation [27]. Elderly patients with diabetes are affected by factors such as decreased exercise and sensory function, cognitive dysfunction

RG were significantly higher than they were in the CG ( $P < 0.05$ ) (**Figure 2**).

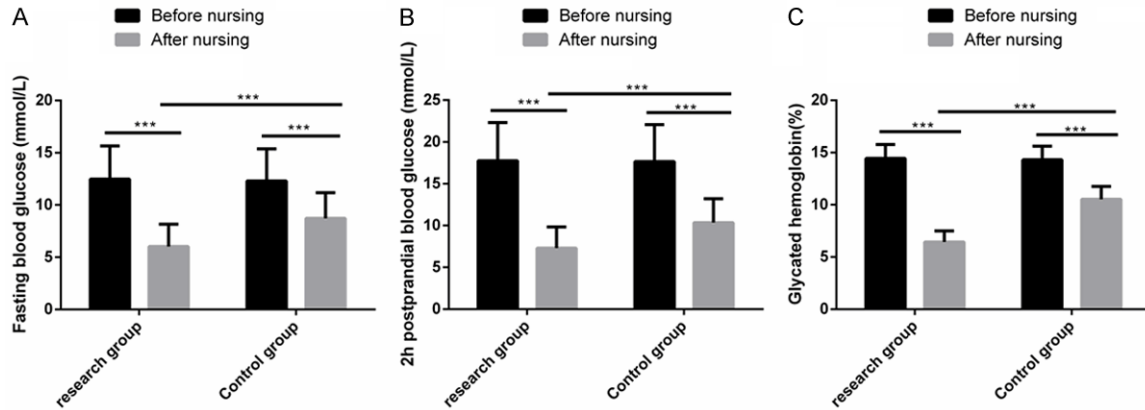
### *Comparison of the self-efficacy scores between the two groups*

Before the nursing intervention, there was no significant difference in the GSES scores in both groups ( $P > 0.05$ ). After the nursing intervention, the GSES scores of the patients were significantly increased in both groups, and the GSES scores of the patients in the RG were significantly higher than they were in the CG ( $P < 0.05$ ) (**Figure 3**).

### *Comparison of the SAS and SDS scores in the two groups*

Before the nursing intervention, there was no significant difference in the SAS and SDS

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**Figure 1.** Comparison of the blood glucose indexes between the two groups. A: Before the nursing intervention, there was no significant difference in the fasting blood glucose levels in the two groups. After the nursing intervention, the fasting blood glucose levels were significantly decreased in the two groups, and the levels in the RG were significantly lower than they were in the CG. B: Before the nursing intervention, there was no significant difference in the blood glucose levels at two hours after a meal between the two groups. After the nursing intervention, the blood glucose levels at two hours after a meal were significantly decreased in the two groups, and the levels in the RG were significantly lower than they were in the CG. C: Before the nursing intervention, there was no significant difference in the glycosylated hemoglobin levels in the two groups. After the nursing intervention, the glycosylated hemoglobin levels were significantly decreased in the two groups, and the levels in the RG were significantly lower than they were in the CG. Note: \*\*\* $P < 0.001$ .

**Table 2.** Comparison of the treatment compliance between the two groups [n (%)]

Grouping	Drug therapy	Diet therapy	Blood glucose self-test therapy	Kinesitherapy
RG (n=62)	56 (90.32)	53 (85.48)	53 (85.48)	50 (80.65)
CG (n=58)	40 (68.96)	38 (65.52)	37 (63.79)	35 (60.34)
$\chi^2$	8.543	6.519	7.519	5.978
P	0.003	0.010	0.006	0.014

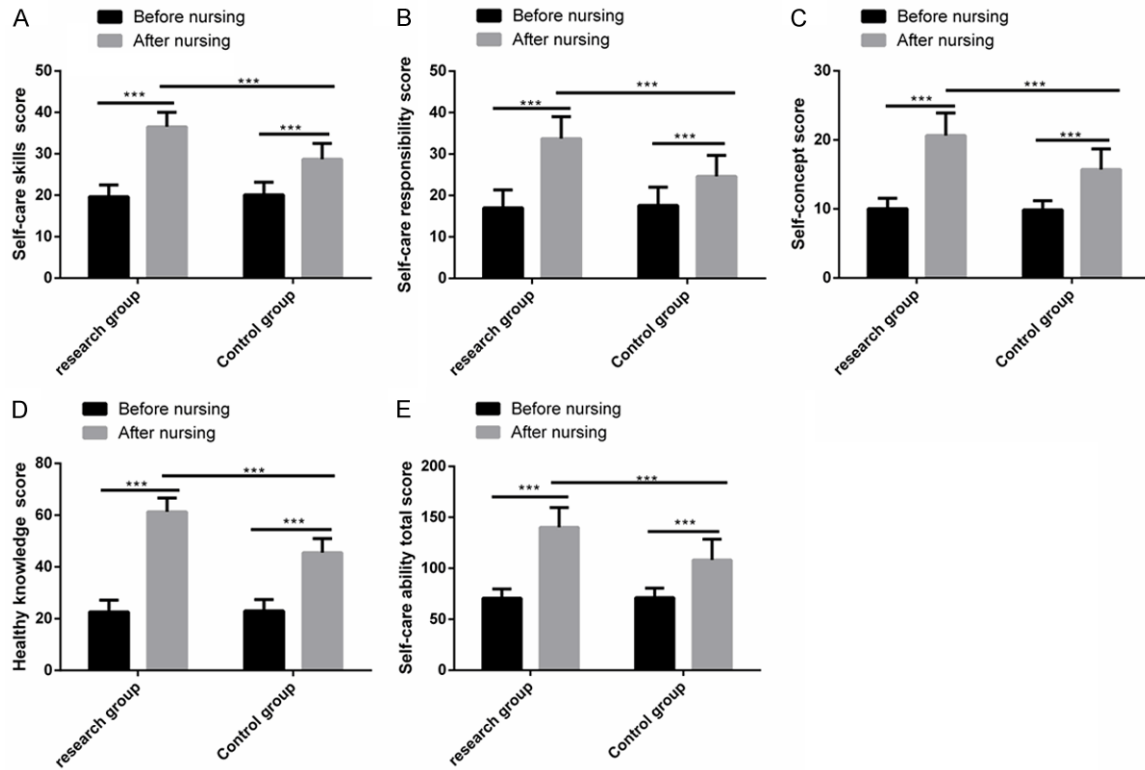
tion, and psychosocial family issues, so their treatment compliance is seriously reduced [28]. Therefore, besides effective clinical treatment, a safe, effective and reasonable nursing intervention is also an important strategy to ameliorate patients' therapeutic compliance and quality of life.

In this study, we implemented the KTH integrated nursing intervention model for elderly patients with diabetes and discussed its influence on therapeutic compliance and quality of life. Ghahremani et al. [29] report that health education interventions for female patients with breast cancer can improve women's health and reduce the occurrence and prognosis of breast cancer. For example, in Odgers-Jewell et al.'s studies [30], the application of the group-based education intervention nursing model in diabetic patients was found to sig-

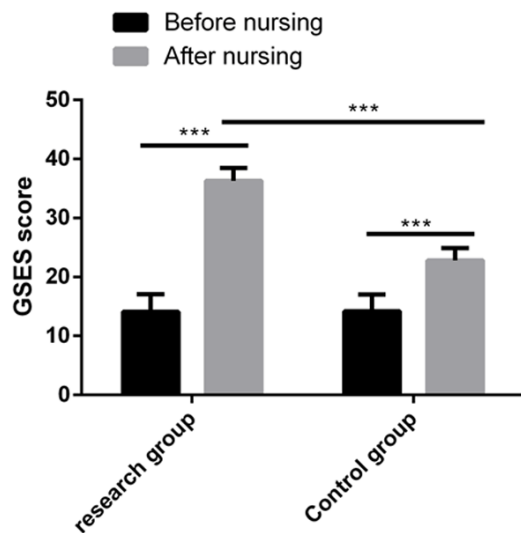
nificantly improve their lifestyle and mental health, and it had a positive effect on blood sugar control. The findings of this study revealed that the fasting blood glucose, blood glucose two hours after a meal, and glycosylated hemoglobin levels of the patients in the RG were significantly lower than they were in the CG after the

nursing intervention, indicating that the KTH integrated nursing mode can help patients to control their blood glucose levels better. Compared with the conventional nursing intervention mode, the KTH integrated nursing model played a positive role in the patients' behavior and psychology through comprehensive health education, psychological intervention, and diet and exercise intervention, which was conducive to controlling the disease, and this was similar to the research results of Ghahremani et al. and Odgers-Jewell et al. [29, 30]. In the research results of Babenko et al. [31], it is reported that the cognitive function and psychological and emotional health status of diabetic patients are positively correlated with their therapeutic compliance and quality of life, and their therapeutic compliance and quality of life can be significantly improved by ameliorating their cognitive func-

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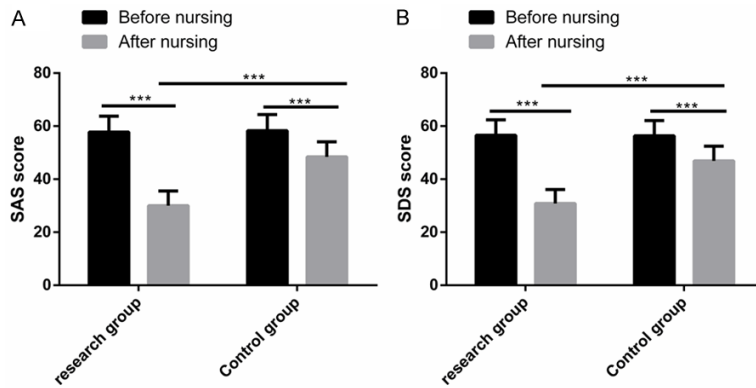
**Figure 2.** Comparison of the self-care ability scores between the two groups. A: Before the nursing intervention, there were no significant difference in the self-care skill scores between the two groups. However, after the nursing intervention, the scores were significantly increased in both groups, and the scores in the RG were significantly higher than they were in the CG. B: Before the nursing intervention, there were no significant differences in the self-care responsibility scores between the two groups. However, after the nursing intervention, the scores were significantly increased in both groups, and the scores in the RG were significantly higher than they were in the CG. C: Before the nursing intervention, there were no significant differences in self-concept scores between the two groups. However, after the nursing intervention, the scores were significantly increased in both groups, and the scores in the RG were significantly higher than they were in the CG. D: Before the nursing intervention, there was no significant difference in the health knowledge level scores between the two groups. However, after the nursing intervention, the scores were significantly increased in both groups, and the scores in the RG were significantly higher than they were in the CG. E: Before the nursing intervention, there was no significant difference in the total self-care ability scores between the two groups. However, after the nursing intervention, the scores were significantly increased in both groups, and the scores in the RG were significantly higher than they were in the CG. Note: \*\*\* $P < 0.001$ .



**Figure 3.** Comparison of self-efficacy scores between the two groups. Before the nursing intervention, there was no significant difference in the GSES scores between the two groups. After the nursing intervention, the GSES scores of the patients were significantly increased in both groups, and the GSES scores of the patients in the RG were significantly higher than those in the CG. Note: \*\*\* $P < 0.001$ .

tion, anxiety and depression. In the studies of Deeb et al. [32], it is suggested that the diabetes education nursing model can reduce the incidence and hospitalization rate of diabetic ketoacidosis in children and adolescents, and ameliorate their quality of life. The results of this study showed that the patients' compliance in the RG was significantly higher than it was in the CG, indicating that KTH integrated

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**Figure 4.** Comparison of SAS score and SDS scores between the two groups. A: Before the nursing intervention, there was no significant difference in the SAS scores between the two groups. After the nursing intervention, the SAS scores of the patients were significantly decreased in both groups, and the SAS scores of the patients in the RG were significantly lower than those in the CG. B: Before the nursing intervention, there was no significant difference in the SDS scores between the two groups. After the nursing intervention, the SDS scores of the patients were significantly decreased in both groups, and the SDS scores of the patients in the RG were significantly lower than they were in the CG. Note: \*\*\* $P < 0.001$ .

nursing has more advantages in improving patients' treatment compliance. In the nursing process, individualized health education programs were formulated for patients, so that they could develop a better lifestyle and take the initiative to engage in healthy behaviors, which increased patients' confidence in treatment, thus improving their treatment compliance and finally controlling their illness. This was similar to the research results of Babenko et al. and Deeb et al. [31, 32]. The findings of this study revealed that the self-nursing ability and self-efficacy of the patients in the RG were significantly better than they were in the CG, suggesting that KTH integrated health education can significantly ameliorate the patients' self-nursing abilities and self-efficacy. In the nursing process, enhancing one's nursing skills and gaining an in-depth understanding of the disease can promote self-care abilities and self-efficacy. In the studies of Piatt et al. [33], it is revealed that multiple nursing interventions can significantly improve the quality of life, self-health behavior, mental health, and self-management abilities of diabetic patients after a 3-year follow-up. In this study, we also evaluated the anxiety and depression of patients before and after the nursing intervention. The results showed that the unhealthy emotions of patients in the RG improved greatly after the intervention, indicat-

ing that KTH integrated health education can alleviate the patients' unhealthy emotions. In this study, we evaluated the quality of life of patients after the nursing intervention. The findings revealed that the quality of life scores in the RG were higher than they were in the CG, indicating that KTH integrated health education can significantly improve the quality of life by integrating the patients' individual characteristics and intervening in various aspects (such as diet, exercise, drugs and blood glucose monitoring), which is similar to the research results of Piatt et al. [33]. Finally, we also studied nursing satisfaction. The findings revealed that the satisfac-

tion in the RG was significantly higher than it was in the CG, which also indicates that KTH integrated nursing intervention is more acceptable and popular among patients.

To sum up, KTH integrated nursing intervention can improve treatment compliance and quality of life in elderly patients with diabetes. At the same time, it can also improve patients' self-care abilities, self-efficacy, and nursing satisfaction. However, there is still room for improvement in this study. First, in a future study, we can increase the long-term nursing intervention for patients and explore the influence of KTH integrated nursing on the relapse of elderly patients with diabetes. In addition, we can also analyze the risk factors that affect the relapse and complications of elderly patients with diabetes, which is of great value in preventing complications for elderly patients with diabetes.

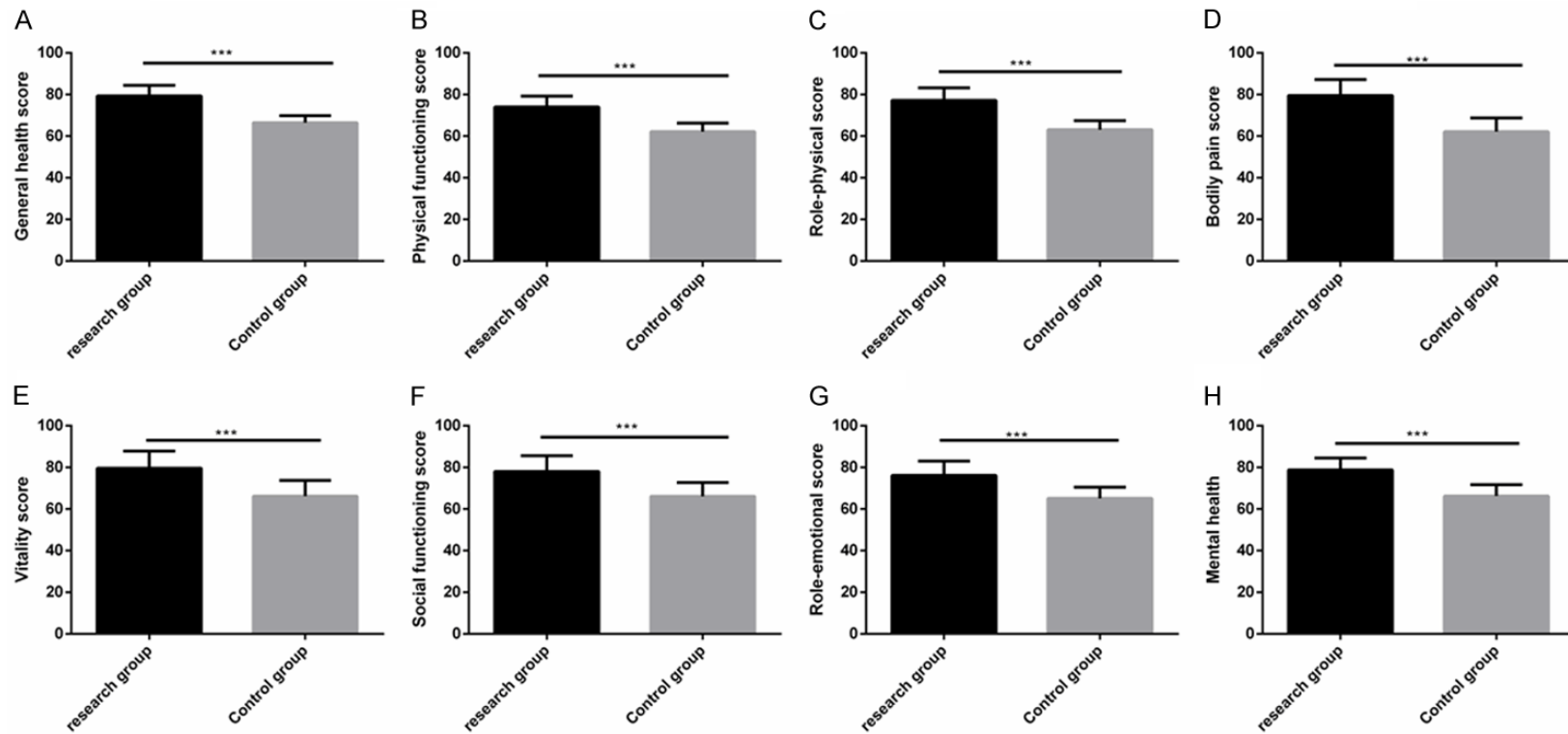
### Disclosure of conflict of interest

None.

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**Figure 5.** Comparison of the quality of life scores between the two groups. A: The general health scores in the RG were significantly higher than they were in the CG. B: The physiological function scores in the RG were significantly higher than they were in the CG. C: The physiological role scores in the RG were significantly higher than they were in the CG. D: The physical pain scores in the RG were significantly higher than they were in the CG. E: The life vitality scores in the RG were significantly higher than they were in the CG. F: The social function scores in the RG were significantly higher than they were in the CG. G: The emotional function scores in the RG were significantly higher than they were in the CG. H: The mental health scores in the RG were significantly higher than they were in the CG. Note: \*\*\*P < 0.001.

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**Table 3.** Comparison of the nursing satisfaction in the two groups after the nursing intervention [n (%)]

Items	RG (n=62)	CG (n=58)	$\chi^2$ value	P value
Great satisfaction	45 (72.58)	29 (50.00)	-	-
Satisfactory	14 (22.58)	13 (22.41)	-	-
Dissatisfaction	3 (4.84)	16 (27.59)	-	-
Nursing satisfaction	59 (95.16)	42 (72.41)	11.640	< 0.001

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