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Analysis of the Importance of Basic Nursing in Clinical Nursing

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Abstract: Primary nursing plays a key role in nursing education. In clinical practice, basic nursing is the embodiment of the value of nurses. At the same time as developing professional nursing, we should pay attention to and correct the nursing attitude of basic nursing, make it return to basic education and guide the ability of clinical nursing, so as to improve the ability of clinical thinking and judgment.

Keywords: Basic Nursing; Clinical Nursing; Significance

1. The importance of basic nursing in clinical nursing

Basic nursing quality is the quality of hospital nursing work, is the most basic and important content of clinical nursing work. In seven minutes of nursing work, basic care accounted for the majority. Basic nursing includes patient's life nursing, condition observation, nursing technique operation, disinfection and isolation, department management, etc. The quality of primary care directly affects the improvement and rehabilitation of patients. Basic nursing work is the best physical and mental state to receive patient data and recover as soon as possible.

1.1 Fundamental nursing is the basis of various of specialized nursing

Basic nursing is the basis of nursing in various departments. Clinical nurses must master basic medical knowledge, technical functions and work in order to do professional nursing work.

Taking the observation of vital signs as an example, there are abnormal changes in vital signs. Vital signs observation is one of the important contents of basic lactation. A thermometer on the front page of each case records changes in vital signs. The thermometer records daily changes in temperature, pulse, respiration, blood pressure, defects, inflow and outflow from vent to vent. And provide clinics with first-hand information on disease diagnosis.

Disinfection and isolation. For example, each person is given a needle during the injection, a cup of medicine is exchanged for the wound, and terminal disinfection is administered when the patient is discharged from the hospital to prevent cross-infection and complications.

For example, all field nurses must be equipped with different nursing intervention techniques. During intubation, toxins are absorbed into the intestine, delaying emergency treatment. No matter how good the car is, it will never run. Also, just like with a seriously ill patient in a hospital, a doctor can't do an entire emergency room if a nurse can't open a vein quickly.

1.2 Basic nursing is the key to ward management

A person's life is inseparable from food, clothing, shelter and transportation, and the patient also needs the help of nurses. The department is a caring place that needs a clean, orderly, quiet, comfortable and safe environment in which patients feel at home. This requires intensive care to avoid cross-infection and reduce infection. So as to improve the quality of breastfeeding and achieve the goal of providing quality services.

2. Problems and countermeasures in nursing work

2.1 Existing problems

2.1.1 Operating panel type obsolete

In order to develop the new operation and new business of clinical nursing, some traditional operation techniques, such as vital signs measurement finger-pointing, have been replaced by the new electrocardiograph monitor. Based on the use of previous infusion pumps, micropumps and glucometers, the previous operating plates had to be replaced by generations.

2.1.2 The expiry date of disposable items is ambiguous or expired

Disposable items used in clinical practice are placed in the operating cabinet for a long time, resulting in blurred traditional marks and inadequate inspection, which leads to the expiration of oxygen inhalation tubes, sputum straws, nasal feeding tubes and other catheters and syringes, resulting in a waste of medical resources.

2.1.3 Sterile items expired

The qualified rate of sterile articles is required to reach 100% in grade A hospitals, but the expiration of sterile articles in clinical work still occurs from time to time. Especially during weekends and holidays, nursing staff often do not have a strong sense of responsibility or forget to cause the expiration of sterile items.

2.1.4 Operation items are not added in time

In addition to burning disposable items, the remaining items need to be put on the operating plate after treatment, and immediately add disposable items.

2.1.5 The instrument is not checked and maintained in time

The few cars available can't hold all the emergency supplies. All kinds of night boxes in the operation plate, such as oxygen table, infusion pump, electrocardiograph monitor will not cause failure due to long-term use or long-term placement of the nursing staff often in the negligence of work and the emergency situation of the present teaching material obstacles, delay the first aid of patients, causing medical disputes.

2.2 Countermeasures

2.2.1 Unity and individuality coexist

Nursing technical operation quality control members distribute operation panel types and special professional operation questionnaires to all wards of the hospital. After soliciting the opinions of the parents and the nurses in charge of each ward, and presenting the research to the members of the operation quality control group, it was determined that each ward should prepare 10 kinds of basic operating plates. They are oxygen inhalation, sputum aspiration, oral care, various injections, enemas, aseptic techniques, the use of electrocardiograph monitor, the use of infusion pump, nasal feeding, catheterization. In addition, each ward according to the characteristics of the disease to increase the preparation of 2-4 special operating table items. The use of electric shock, breathing apparatus, baby stroking, newborn bath, PICC tube, etc.

2.2.2 Strengthen responsibility

It is a fundamental requirement for every caregiver to strengthen responsibility from the beginning of their duties. No matter what you do, if you do not have a sense of responsibility, it will not go smoothly. The nursing work often maintains the patient's life, the sense of responsibility is very important.

2.2.3 Setting up a log book for operating panel

Each ward set up a register of items used by the operating panel to record the validity period and expiration period of various disposable items in detail. And by the management of special personnel, responsible person implementation, someone is responsible for the class, reasonable division of labor, work does not leak, regular check according to the nursing department issued goods card timely supplement various items, to ensure effective. At the same time, special items are marked in red pens.

2.2.4 Checking all instruments regularly

The inspection of all kinds of machines includes the performance of all kinds of machines, health, charging, repair immediately after the occurrence of failure, in a conspicuous place to write the repair time of the machine, type, etc., for level alternation.

2.2.5 Placing sterile items at designated points

Sterile items in the operating tray are centrally arranged on the sterile items rack, which are arranged in the order before and after the failure period to facilitate inspection at all levels to ensure effectiveness and reduce the expiration of sterile items caused by disordered placement.

3. Recommendations for implementing quality care

3.1 Optimize the upper operation process and make the operation mode of field program

Apply innovative nursing concepts to clinical nursing, optimize workflow, plan, fix and professionalize work patterns. Depending on the characteristics of the department, the head nurse and the general nurse repeatedly find time to improve and optimize the process so that the nurse can spend more time on the patient's head and conduct medical care. At the same time, the process is more streamlined and programmed to prevent nurses from meeting in the treatment room and on the website, so that all nurses can carry out nursing activities in an orderly manner.

3.2 Assess the patient's self-care ability and carry out life nursing reasonably

The specialist team leader must conduct a comprehensive and accurate assessment of the patient in charge on a daily basis and determine lactation levels based on the patient's condition and ability to care. According to the requirements of "eight categories and Seventeen" issued by the Ministry of Health, patients' living habits and needs should be respected, and patients' breastfeeding should be reasonably implemented. For example, nursing guidance for patients who are critically ill, bedridden and unable to manage their lives, as well as "next-level living care", morning and evening care, sleep, diet, nursing defects, etc. In order to protect patients whose condition has improved, stable and can sit down, the following nursing guidance is "secondary nursing life", to protect them from morning and evening care, bedding, meals. For example, defecation care, if the patient's condition is mild, can manage life alone, encourage patients to take care of themselves, strengthen patient safety management, increase patient self-esteem, trust and confusion, promote patients to recover early.

3.3 Patient integrated health guidance

From hospitalization to discharge, nurses should carry out continuous, complete, seamless and comprehensive guidance based on health, and carry out standardized, personalized and professional health education for patients in real life and

personal symptoms. During the stay, the parents were defeated by the missionary work of the Charity Hospital, introducing the patient to the protector of the King, the environment of the ward, and precautions during the stay, making the patient familiar, familiar, and a sense of home. During the hospital stay, tutors conducted various forms of health education, including personalized health education, centralized and systematic health education, health manuals and other forms of distribution, easily understood using PowerPoint. In order to protect the kidney, improve blood circulation and excretion, diuretic, protect the liver, anti-inflammatory, etc., the guidelines for the use of drugs and for patients who cannot remember the name of the drug have been simplified. This allows patients to understand their medication status. For example, professional guidance and PowerPoint presentations on illness focus on the patient. Images and text are rich and easy to understand. The patient is suddenly enlightened, receptive and responds well. Guardians should also strengthen the evaluation of the effect of health education, and then require patients to master health knowledge. The Hui nationality should investigate the implementation of patients' health behavior, correct patients' bad behavior in time, and strengthen patients' health behavior. Follow-up, activity, and dietary guidance were given to patients after discharge to clarify post-discharge preventive measures and establish a healthy lifestyle.

3.4 Implement bedside care

Reject red light calls, clarify the responsibilities of nurses and laboratories at all levels, and implement hospital beds managed by the active soil conservation office. The nurse starts work ten minutes before every morning and is very concerned about the patients and knows their condition. In the course of patient infusion treatment, the nurse correctly evaluated the infusion time according to the patient's infusion volume and infusion rate, and immediately gave the patient fluid and took it. In the difference between nurses and nurses, nurses contact patients, respond to patients' problems, provide nursing and health care, exchange patients' goodwill in a timely manner, exchange patient confidence with love, and exchange patient confidence with a sense of responsibility.

3.5 Pay attention to patient psychology, carry on nursing intervention in time

Due to the lack of physical health, patients will inevitably affect their mental health. The nurse should strengthen the communication with the patient, understand the patient's social, family, economic and psychological situation, timely solve the patient's worry, anxiety and fear, reduce the patient's ideological burden, actively cooperate with the treatment. In many adults, there are patients diagnosed with uremia. Patients can be affected by sudden loss of health, such as not eating or drinking, very low mood, refusing treatment, and poor conversation with nurses. Nurses patiently from the patient's point of view to persuade and nursing, adjust the patient's psychological state, and actively cooperate with the treatment.

The quality of primary hospital care is directly related to the success rate of treatment for critically ill patients, which is crucial to reducing patient mortality. At the same time, improving the quality of breastfeeding is closely related to the overall image of the hospital, economic benefits and social benefits. As a competitive advanced hospital, we always have a sense of crisis, beyond the management and service standards of higher hospitals. If the professional level is too rigid, we can represent the progress of ordinary troops.

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Research on Nurses' Perception Status and Influencing Factors of Oral Health Education Practice, Responsibility and Confidence in Patients with Diabetes Mellitus

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Abstract: Objective: To investigate the perceptions of nurses in the endocrinology department on the practice, responsibility and confidence of oral health education for diabetic patients, and to explore the influencing factors to provide evidence for effective nursing intervention. **Methods:** A questionnaire about oral health education for diabetic patients was prepared by nurses, and 102 endocrinology nurses were investigated and analyzed. **Results:** The total score of the questionnaire survey was (35.18±5.09), which was at a moderate level; 88.2% of the nurses believed that they had the responsibility to discuss oral health issues with diabetic patients, 38.2% of the nurses felt that they lacked sufficient confidence in oral health education, and 52.9% of the nurses reported that they could answer the questions raised by the patients. of oral health-related problems. Once received oral health knowledge training for DM patients and DM specialist nurses were its influencing factors. **Conclusion:** Nurses in endocrinology department feel that they have the responsibility to observe the oral health of diabetic patients, but they rarely do it in practice. Nurses need more knowledge and practical training on the oral health of people with diabetes.

Keywords: Endocrinology; Diabetes; Oral Health Education; Practice; Responsibility; Confidence

Introduction

With the increasing number of patients with diabetes mellitus (DM), oral mucosal lesions, gingival swelling and pain, periodontitis, halitosis and other oral problems caused by oral diseases seriously affect the blood sugar control and general health of patients, and further affect the life of patients with DM. quality^[1]. Given the importance of oral health in people with DM, the provision of appropriate oral health care guidance and healthy lifestyle information is essential^[2]. Although international guidelines recommend that health professionals discuss oral health education with patients with DM, this is difficult to do in clinical practice, and most health professionals cannot regularly assess the oral health status of patients with DM^[3]. The literature shows that the barriers to providing oral health education include lack of time, knowledge, training, conflicting attitudes and beliefs, low sense of responsibility, and even the feeling that patients do not need oral health education at all^[4]. The literature proves that DM patients have a need for oral health information^[5]. To expand this work and improve future education, this study investigated the responsibility, confidence, and practice of endocrinology nurses in delivering oral health education to patients with DM to provide evidence for effective nursing interventions.

1. Objective

Using the convenience sampling method, a questionnaire survey was conducted on 102 nurses in the endocrinology department of 6 general hospitals in a city from June to December 2021. Inclusion criteria: After obtaining the professional qualification of nurses, they have been engaged in clinical work in the hospital for > 1 year, and the age is ≥ 18 years old. Informed consent. Exclusion criteria: patients with a history of mental illness and cognitive impairment. 110 questionnaires were distributed and 102 were recovered, with an effective recovery rate of 92.7%.

2. Method

2.1 Research tools

2.1.1 A questionnaire on the general situation of the research subjects

Prepared by yourself, the content includes: age, gender, marital status, educational level, professional title, current working years, once received oral health education and training, DM specialist nurse.

2.1.2 A questionnaire on nurses' perceptions of oral health education

practice, responsibility and confidence in diabetic patients

It was designed by itself and proved to have good reliability and validity through pre-tests. Including 3 dimensions: Practice (10 items): describe the overall practice status of oral health education, the first 5 items are scored 0-3 points, the last 5 items are scored 0-5 points, the total score range is 0-40 points, the higher the score, the better the nurses' oral health education practice. Responsibility (5 items): It reflects the nurses' perception of the responsibility for providing oral health education. The items are scored from 0 to 3 points, and the total score ranges from 0 to 15 points. The higher the score, the stronger the nurse's sense of responsibility. Confidence (5 items): It reflects the nurses' perceived confidence in providing oral health education. The items are scored from 0 to 3, and the total score ranges from 0 to 15. The higher the score, the greater the confidence of nurses in implementing oral health education.

2.3 Statistical analysis

SPSS 22.0 was used to analyze the data. Descriptive statistical analysis was performed on the study variables, t-test was used for comparison of two variables, ANOVA was used for univariate analysis, and multiple linear regression analysis was used for multivariate analysis. $P < 0.05$ was statistically significant.

3. Result

3.1 General information of research subjects

Among the research subjects, 90 were women and 12 were men; 59 were married, accounting for 57.8%; 82 were college or undergraduate, accounting for 80.4%, and 46 were nurses in charge, accounting for 45.1%, currently working 49 were 6-10 years old, accounting for 48.1%. Nine nurses were diabetes specialist nurses, 25.5% of nurses reported having received continuing education or training on oral health with DM, and most nurses expressed interest in participating in seminars on oral health education for patients with DM.

3.2 Nurses' perception of oral health education practice, responsibility and confidence in DM patients

Based on the questionnaire scores of the research subjects, the total score of the questionnaire and the P25 and P75 of each dimension score were obtained, which were divided into three levels: low, medium and high. See Table 1.

Table 1 Nurses' perception of oral health education

practice, responsibility and confidence in patients with diabetes (n=102)

Items	Scores ($\bar{x} \pm s$)	Level
Practice	15.27±4.23	Low
Responsibility	12.88±3.77	High
Confidence	7.65±1.65	Middle
Total scores	35.18±5.09	Middle

3.3 Univariate analysis of nurses' perceptions of oral health education

practice, responsibility and confidence in patients with DM

Taking nurses' perception of oral health education practice, responsibility and confidence in DM patients as dependent variables, and their general data as independent variables, univariate analysis was conducted, and a total of 4 variables had an impact on it. See Table 2.

Table 2 Univariate analysis of nurses' perceptions of

oral health education practice, responsibility and confidence in patients with DM (n=102)

Items	n	Scores ($\bar{x} \pm s$)	t/F	P
Current working years (years)			3.142	0.002
0-5	29	27.58±2.99		
6-10	49	32.56±1.23		
> 10	24	44.61±1.39		
Job title			4.033	0.001
Nurse and below	42	26.79±1.90		
Nurse in charge	46	35.26±1.53		
Deputy Chief Nurse and above	14	45.87±1.23		
Have received oral health knowledge training for DM patients			-9.543	0.000
Yes	26	45.56±1.45		
No	76	29.47±1.89		
DM specialist nurse			-16.345	0.000
Yes	9	55.12±1.67		
No	93	23.47±1.89		

3.4 Multivariate analysis of nurses' perceptions of oral health education

practice, responsibility and confidence in patients with DM

Using nurses' perception scores of oral health education practice, responsibility and confidence in DM patients as the dependent variable, the variables with statistical significance in the univariate analysis were used as independent variables for multiple linear regression analysis. The results were as follows: once received oral health knowledge training for patients with DM and whether DM specialist nurses were the influencing factors, see Table 3.

Table3 Multivariate analysis of nurses' perceptions of
oral health education practice, responsibility and confidence in patients with DM

Variable	β	SE	β'	t	P
Constant	28.11	1.223	—	21.889	0.000
Have received oral health knowledge training for DM patients	-0.896	0.345	-0.115	-3.028	0.000
DM specialist nurse	-0.629	0.458	-0.228	-4.363	0.000

Note: $R^2=0.617, R^2=0.608, F=29.351, P=0.000$.

4. Discussion

With the acceleration of the aging process of my country's population, the incidence of DM shows a higher development trend. Studies have shown that if the blood sugar level of patients is not well controlled, it is very easy to cause various infections in the oral cavity, which in turn lead to various complications^[6]. Therefore, scientific and correct oral education for DM patients plays a pivotal role in maintaining healthy oral function and good quality of life.

In this study, 88.2% of the nurses believed it was their responsibility to discuss oral health issues with DM patients, 2.0% disagreed, and 9.8% were not sure. 38.2% of the nurses felt that they lacked sufficient confidence in oral health education, 48.1% thought they had some confidence, and 13.7% felt that they had rich knowledge and confidence in oral health education. 52.9% of nurses reported being able to answer oral health-related questions raised by patients. About 21.8% of nurses were able to regularly assess patients' oral health, and most nurses reported that they paid little attention to oral problems and only sometimes provided reference. Indeed, many nurses pay more attention to matters closely related to patients' disease symptoms and drug treatment in their daily practice. When solving oral problems for patients, nearly half of the nurses have a moderate level of confidence, and there is room for further improvement. The acquisition of confidence comes from one's own knowledge and energy reserves, on the other hand, from the individual's successful behavior and practice. Therefore, continuing education on oral health should be provided regularly for endocrinology nurses to continuously improve their knowledge level, increase the experience of successful experience, and enhance their confidence.

The questionnaire scores of nurses who received DM oral health knowledge training were significantly higher than those who did not. Nurses may benefit from specific training courses that go a long way towards increasing oral health knowledge and skills. Nurses with working years and professional titles have significantly different perceptions of oral health education practice, responsibility and confidence. It may be that the longer the nurses have been engaged in the current position, the higher the professional title, the richer the theoretical and practical knowledge, and the confidence in providing health education. The greater the sense of responsibility.

To sum up, endocrinology nurses have a strong sense of responsibility for oral health education of DM patients, but their practice and confidence need to be improved. As the main force of health education, nurses should strengthen their own study of oral health knowledge of DM patients, and at the same time do a good job in patients' health education, so as to improve their oral health awareness and knowledge and behavior level, and reduce the occurrence of DM complications.

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Study on Sleep Quality and Influencing Factors in Patients with Coronary Heart Disease

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Abstract: **Objective:** To understand the status of sleep quality and family care in patients with coronary heart disease (CHD), and to analyze the factors affecting sleep quality. **Methods:** Convenience sampling method was used to select 164 patients with CHD who met the inclusion criteria in a tertiary hospital in a city. The general information questionnaire, the family care index and the Pittsburgh sleep quality scale were used to conduct a questionnaire survey on the patients. **Results:** The average score of sleep quality in patients with CHD was (8.96 ± 4.409) , and 60.4% of patients had sleep quality problems; the average score of family care was (6.29 ± 2.383) , and 50% of patients with poor family function; Logistic regression results showed that sleep quality The influencing factors are: gender, marital status, weekly visits by children's relatives and friends, and weekly physical activity. **Conclusion:** Patients with CHD have poor sleep quality and more patients with family dysfunction. Sleep can be improved by improving the patient's family care level and regular exercise.

Keywords: Coronary Heart Disease (CHD); Sleep Quality; Family Care

Introduction

According to the "China Cardiovascular Health and Disease Report 2020", the number of people suffering from cardiovascular disease in my country will reach 330 million in 2020, of which 11.39 million suffer from coronary heart disease (CHD). CHD has become one of the diseases that threaten human health^[1]. Most CHD patients suffer from sleep disturbance, which not only affects the quality of life, but also leads to a poor prognosis of the disease. Thirteen cohort studies concluded that sleep disturbance increases the risk of cardiovascular disease or death. Therefore, improving sleep quality could serve as a new target for improving CHD prognosis. As an important indicator to evaluate family function and measure the quality of life of patients, family care has an important impact on the prognosis of patients. Relevant studies have shown that improving the patient's family care can help improve the patient's sleep quality^[2]. This paper aims to understand the current situation of sleep quality and family care in patients with coronary heart disease, and analyze the influencing factors of sleep quality from the aspects of population, economy and family.

1. Objects and Methods

1.1 Survey Objects

A questionnaire survey was conducted by 170 CHD patients from a third-class hospital in a city. Inclusion criteria: (1) clinical diagnosis of CHD; (2) age ≥ 18 years; (3) communication barrier-free; (4) voluntary participation; Exclusion criteria: (1) have a mental illness; (2) there are serious organic diseases. In this study, 170 questionnaires were distributed and 164 questionnaires were effectively recovered, with an effective rate of 96.5%.

1.2 Research Method

1.2.1 Investigation Tools

(1) General information questionnaire.

(2) Pittsburgh sleep quality index ^[3]: A total of 18 self-assessment entries, divided into 7 dimensions. The total score of PSQI is the sum of the points for 7 dimensions, and the higher the score, the worse the sleep quality. A score of ≤ 7 points indicates no sleep quality problems, and > 7 points indicates sleep quality problems. This scale Cronbach's α coefficient is 0.842.

(3) Family Care Index^[4]: This scale is composed of family adaptability, cooperation, growth, emotion and intimacy. Each entry is scored on a three-point scale: "rarely" is scored on 0 points, "sometimes this way" is counted as 1 point, "often this way" is scored on 2 points, and the higher the score, the better the family function. A score of 0 to 3 indicates severe dysfunction in the family, a score of 4 to 6 indicates a moderate dysfunction, and a score of 7 to 10 indicates that the family function is good. This scale Cronbach's α coefficient is 0.813.

1.3 Statistical methods

SPSS 25.0 software was used to analyze the data. Descriptive analysis, X^2 test and Logistic regression analysis were used to study sleep quality and influencing factors in patients with coronary heart disease.

2. Results

2.1 Status of sleep quality of CHD patients (see Table 1 for details)

There were 65 CHD patients with $PSQI \leq 7$ points, accounting for 39.6%, and 99 patients with $PSQI > 7$ points, accounting for 60.4%.

Table 1 Total sleep quality scores and scores of CHD patients in various dimensions

Item	Entry	Score Range	Median	Quartile (P25, P75)
Total sleep quality score	19	1~18	9	(6,12)
Subjective sleep quality	1	0~3	2	(1,2)
Time required to fall asleep	2	0~3	2	(1,2)
Sleep time	1	0~3	1	(0,1)
Sleep efficiency	3	0~3	1	(0,1.75)
Sleep disorders	9	0~3	2	(1,2)
Hypnotherapy drugs	1	0~3	0	(0,2)
Daytime dysfunction	2	0~3	2	(1,2)

2.2 Status of family caring degree of CHD patients (see Table 2 for details)

The average score of family care in 164 CHD patients was (6.29 ± 2.383) , 82 (50%) had good family function, 58 (35.4%) had moderate disability, and 24 (14.6%) had severe disability.

Table 2 Total scores of family care for patients with CHD and scores in various dimensions

Item	Minimum	Maximum	Median	Quartile (P25, P75)
Total Family Care score	0	10	6.5	(4,8)
Adaptability	0	2	1	(1,2)
Degree of cooperation	0	2	1	(1,2)
Growth	0	2	1	(1,2)
Emotionality	0	2	1	(1,2)
Intimacy	0	2	1	(1,2)

2.3 Influencing factors of sleep quality of CHD patients

2.3.1 Univariate analysis of sleep quality

Taking sleep quality as the dependent variable and general data as the independent variable, it was transformed into a categorical variable according to no sleep quality problems ($PSQI \leq 7$) and sleep quality problems ($PSQI > 7$). The results of univariate analysis showed that under the grouping of gender, age, number of children, number of children's visits, marital status, living style, education level, occupational status, personal monthly income, smoking, drinking, the number of weekly exercise and the time of each exercise, The difference between sleep quality was statistically significant ($P < 0.05$). See Table 3.

Table 3 Univariate analysis of sleep quality of CHD patients

Items		n	PSQI≤7(n)	PSQI>7(n)	χ^2	P
Gender	Female	84	49	35	25.166	0.000**
	Male	80	16	64		
Age	<60	72	39	33	10.045	0.002**
	≥60	92	26	66		
Number of children	0	11	9	2	7.059	0.008**
	1-2	115	45	70		
	>2	38	11	27		
Number of visits from relatives and friends of children	< 1 time per week	53	12	41	23.879	0.000**
	1 time per week	54	16	38		
	> once a week	57	37	20		
Marital status	Unmarried	18	13	5	12.170	0.007**
	Married	124	47	77		
	Divorce	5	0	5		
	Widow	17	5	12		
Mode of living	Living alone	106	32	74	11.177	0.001**
	Live with children	58	33	25		
Educational attainment	not attending school	12	3	9	20.892	0.000**
	Elementary school	46	13	33		
	Junior	35	12	23		
	High school or secondary school	37	17	20		
	Junior College and above	34	23	11		
Occupational Status	< 1 time per week	56	13	43	11.977	0.003**
	1 time per week	69	37	32		
	> once a week	39	15	24		
Personal income	<2000 元	23	4	19	19.227	0.000**
	2000~5000 元	99	33	66		
	>5000 元	42	28	14		
Smok	No	131	57	74	4.091	0.043*
	Yes	33	8	25		
Drink alcohol	No	114	55	59	10.439	0.001**
	Yes	50	10	40		
Exercise times per week	<3 times/week	84	17	67	28.988	0.000**
	3~5 times/ week	70	40	30		
	> 5times/week	10	8	2		
Time per exercise	<30min	76	21	55	8.528	0.014*
	30~60min	82	41	41		
	>60min	6	3	3		

Note: * $P<0.05$ and ** $P<0.01$ are statistically significant

2.3.2 Multivariate analysis of sleep quality

Taking the presence or absence of sleep quality problems as the dependent variable (none = 0, yes = 1), and the variables with statistical significance in the univariate analysis as the independent variables, assign values to the independent variables, and according to a $\alpha = 0.05$, a $\beta = 0.10$ standard was included in the logistic regression model, the results showed that gender, marriage, the frequency of visits by children and relatives and friends and the number of weekly exercise were included in the regression equation. See Table 4 for details.

Table 4 Logistic regression analysis of the influencing factors of sleep quality of CHD patients

variable	reference group	B	SE	Wald	P	OR	95%CI
Gender							
Female	male	1.641	0.453	13.108	0.000	5.158	2.122-12.536
Frequency of visits from relatives and friends of children							
> 1 time/week	<1 time/week	-1.582	0.610	6.738	0.009	0.205	0.062-0.679
Number of exercises per week							
3~5 times a week	<3 times a week	-1.208	0.449	7.246	0.007	0.299	0.124-0.720
> 5 times a week		-2.868	0.998	8.249	0.004	0.057	0.008-0.402

3. Discussion

3.1 The sleep quality of CHD patients

Of the 164 CHD patients, 99 (60.4%) had problems with sleep quality, a result higher than that of other studies. 1 The total mean score of sleep quality of the patients in this survey was (8.96±4.409), which was at a moderate level, which was basically consistent with the mean total score of sleep quality obtained by Douheqin (8.95±3.62). The quality of sleep in patients with CHD is poor, and medical care and family members should pay attention.

3.2 The level of family care of CHD patients

This study showed that the overall mean of family care for CHD patients was (6.29±2.38), which was relatively low. Among them, 82 (50%) had good family function, 58 (35.4%) had moderate impairment, and 24 had severe impairment. (14.6%), indicating that the level of family care for patients with coronary heart disease is not good, which is lower than that of other studies. The reason may be that most of the patients in this survey are around 60 years old, they are about to retire or have already retired, and their children are busy with themselves. their careers and families, less emphasis on humanistic care, and unaware that family care has a positive impact on patients' sleep and recovery.

3.3 Influencing factors of sleep quality of CHD patients

3.3.1 Gender

In this study, women with poor sleep quality accounted for 64.6% and men with poor sleep quality accounted for 35.4%. Due to changes in sex hormones in the body, female patients have an increased risk of sleep quality problems. Studies have shown that melatonin, which maintains sleep, decreases with women's menopause, resulting in a decline in women's sleep quality. In addition, women are more delicate and sensitive, and are more concerned about family and marriage trivial matters. With the changes in the family structure and environment in China, women shoulder the responsibility of taking care of their grandchildren and need to spend more time and energy. These factors will affect the quality of sleep. decline.

3.3.2 Exercise situation

The survey results show that there are differences in the sleep quality of coronary heart disease patients with different exercise situations. 67.7% of those who exercised less than 3 times a week had poor sleep quality. Studies by Gong Mingjun and others found that exercising more than 3 times a week has the most significant effect on improving sleep disorders. Maintaining a certain degree of exercise can promote perspiration, increase fatigue, and shorten the sleep latency of patients.

3.3.3 Frequency of visits from relatives and friends of children

Some studies have found that the support of social relationships is closely related to sleep quality. The more frequent the supportive connection is, the better the sleep quality. The results of this study are consistent with the above results. Patients with fewer visits from relatives and friends of their children are more likely to have sleep quality problems. Lack of family affection makes patients feel lonely and helpless, which affects their sleep.

The quality of sleep in patients with coronary heart disease is poor, and the sleep status can be improved by improving the patient's family care level and regular exercise.

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Correlation Between Sleep Quality and Family Care in Patients with Coronary Heart Disease

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Abstract: Objectives: To understand the current status of sleep quality and family care in patients with coronary heart disease and discuss the correlation between the two. **Methods:** A questionnaire was conducted on 164 patients with coronary heart disease using the General data questionnaire, the Pittsburgh sleep quality index(PSQI) and the Family care index using a convenient sampling method. **Results:** The median of sleep quality of patients with coronary heart disease was 9 points, and 60.4% of patients with sleep quality problems; The median of family care was 6.5, and 50% with poor family functioning; The total score of sleep quality was negatively correlated with the total score of family care and various dimensions($P<0.01$). That is, the higher the level of family care for patients with coronary heart disease, the better the quality of sleep. **Conclusions:** Patients with coronary heart disease have poor sleep quality and major patients with dysfunction in the family. It is recommended to improve sleep state and promote the prognosis of the disease by increasing the level of family care of the patient.

Keywords: Coronary Heart Disease; Sleep Quality; Family Care

Introduction

With the progressing of society and the accelerating of aging rate, the incidence of coronary heart disease(CHD) is increasing year by year. The Data of *China Cardiovascular Health and Disease Report 2020* displayed that, there are 330 million people suffering from cardiovascular disease, including 11.39 million patients with CHD, CHD has become one of the most leading diseases affecting human health. Most patients with CHD suffer from sleep disorders that not only affect their physical and mental condition and quality of life, but also lead to worsening of the disease^[1]. Sleep is one of the important indicators of a patient's health, and good sleep can relieve brain fatigue and promote physical recovery. From 13 cohort studies that sleep disorders increase the prevalence or mortality of cardiovascular disease. Family care is an important indicator of family function and quality of life, and has an important impact on the prognosis of patients. Related studies have shown that increasing patients' family care is beneficial to alleviate negative emotions and improve patients' sleep and quality of life^[2]. Previous studies have focused on insomnia in patients with CHD and the influence of family functional factors on sleep quality, and have not discussed sleep quality, family care status, and the relationship between the two. This paper explores the relationship between CHD patients by understanding the current status of sleep quality and family care, aiming to provide a reference for improving the sleep quality of CHD patients.

1. Objects and methods

1.1 Research Objects

A questionnaire survey was conducted by 170 CHD patients from a third-class hospital in a city. Inclusion criteria: (1) clinical diagnosis of CHD; (2) age ≥ 18 years; (3) communication barrier-free; (4) voluntary participation; Exclusion criteria: (1) have a mental illness; (2) there are serious organic diseases. In this study, 170 questionnaires were distributed and 164 questionnaires were effectively recovered, with an effective rate of 96.5%.

1.2 Research Method

1.2.1 Investigation Tools

(1) General information questionnaire.

(2) Pittsburgh sleep quality index ^[3]: A total of 18 self-assessment entries, divided into 7 dimensions. The total score of PSQI is the sum of the points for 7 dimensions, and the higher the score, the worse the sleep quality. A score of ≤ 7 points indicates no sleep quality problems, and > 7 points indicates sleep quality problems. This scale Cronbach's α coefficient is 0.842.

(3) Family Care Index ^[4]: This scale is composed of family adaptability, cooperation, growth, emotion and intimacy. Each entry is scored on a three-point scale: "rarely" is scored on 0 points, "sometimes this way" is counted as 1 point, "often this way" is scored on 2 points, and the higher the score, the better the family function. A score of 0 to 3 indicates severe dysfunction in the family, a score of 4 to 6 indicates a moderate dysfunction, and a score of 7 to 10 indicates that the family function is good. This scale Cronbach's α coefficient is 0.813.

1.2.2 Statistical analysis methods

SPSS 25.0 software was used to analyze the data. Descriptive analysis was used to study the patient's general information, sleep quality and family care status; The relationship between sleep quality and family care in patients with CHD was studied using Spearman correlation analysis.

2. Results

2.1 General information of patients with CHD

General information on patients with CHD is detailed in Table 1.

Table 1 General data of patients with CHD (n=164)

Item	Grouping	Number of cases (n)	Composition ratio (%)
Gender	Female	80	48.8
	Male	84	51.2
Age	<60	72	47.6
	≥60	92	52.4
Number of visits from relatives and friends of children	< 1 time per week	53	32.3
	1 time per week	54	32.9
	> once a week	57	34.8
Marital status	Unmarried	18	11.0
	Married	124	75.6
	Divorce	5	3.0
	Widow	17	10.4
Mode of living	Living alone	106	64.6
	Live with children	58	35.4
	not attending school	12	7.3
Educational attainment	Elementary school	46	28.0
	Junior	35	21.3
	High school or secondary school	37	22.6
	Junior College and above	34	20.7
	Cadre/Civil servant	34	20.7
Occupational type	Technician	32	19.5
	Trader	24	14.6
	Farmer	55	33.5
	Other	19	11.6
	Retired	56	34.1
Occupational Status	Incumbent	69	42.1
	Other	39	23.8
Personal income	<2000 yuan	23	14.0
	2000~5000 yuan	99	60.4
	>5000 yuan	42	25.6
Smok	No	131	79.9
	Yes	33	20.1

Drink alcohol	No	114	69.5
	Yes	50	30.5
Drink coffee	No	130	79.3
	Yes	34	20.7
Medical expenses payment method	Medicare	108	65.9
	Rural cooperation medical	38	23.2
	Business insurance	7	4.3
	At own expense or other	11	6.7

2.2 Current status of sleep quality in patients with CHD

The current status of sleep quality in CHD patients is detailed in Tables 2 and 3.

Table 2 Total sleep quality scores and scores of CHD patients in various dimensions

Item	Entry	Score Range	Median	Quartile (P25, P75)
Total sleep quality score	19	1~18	9	(6,12)
Subjective sleep quality	1	0~3	2	(1,2)
Time required to fall asleep	2	0~3	2	(1,2)
Sleep time	1	0~3	1	(0,1)
Sleep efficiency	3	0~3	1	(0,1.75)
Sleep disorders	9	0~3	2	(1,2)
Hypnotherapy drugs	1	0~3	0	(0,2)
Daytime dysfunction	2	0~3	2	(1,2)

Table 3 Frequency distribution of sleep quality problems in CHD patients

	PSQI≤7(no sleep quality issues)	PSQI>7(sleep quality issues)
Number	65	99
Percentage (%)	39.6	60.4

2.3 Current status of family care in patients with CHD

The current status of family care for CHD patients is detailed in Tables 4 and 5.

Table 4 Total scores of family care for patients with CHD and scores in various dimensions

Item	Minimum	Maximum	Median	Quartile (P25, P75)
Total Family Care score	0	10	6.5	(4,8)
Adaptability	0	2	1	(1,2)
Degree of cooperation	0	2	1	(1,2)
Growth	0	2	1	(1,2)
Emotionality	0	2	1	(1,2)
Intimacy	0	2	1	(1,2)

Table 5 Family care of patients with CHD [n(%)]

Family Care	Score Range	Example (n)	PSQI≤7[n(%)]	PSQI>7[n(%)]
Severe disorders	0~3	24	1(4.2)	23(95.8)
Moderate disorder	4~6	58	7(12.1)	51(87.9)
good	7~10	82	57(69.5)	25(30.5)

2.4 Correlation analysis between sleep quality and family care in patients with CHD

After the normality test, both sleep quality and family care did not conform to the normal distribution ($\text{Sig}=0.004<0.05$, $\text{Sig}=0.000<0.05$), so the Spearman correlation analysis method was used to analyze the correlation between the two. The results showed that the sleep quality of patients with CHD and the total score of family care were negatively correlated ($P<0.01$), that is, the higher the degree of family care of patients with coronary heart disease, the better the sleep quality of patients. See Table 6 for details.

Table 6 Correlation between sleep quality and home care in patients with CHD

	Subjective sleep quality	Time required to fall asleep	Length of sleep	Sleep efficiency	Sleep disorders	Hypnother apy drugs	Daytime dysfunction	PSQI overall score
Adaptability	-0.338**	-0.324**	-0.164*	-0.158*	-0.394**	-0.323**	-0.318**	-0.449**
Degree of cooperation	-0.403**	-0.378**	-0.391**	-0.322**	-0.395**	-0.347**	-0.405**	-0.581**
Growth	-0.411**	-0.488**	-0.294*	-0.322**	-0.530**	-0.428**	-0.419**	-0.625**
Emotionality	-0.431**	-0.404**	-0.342**	-0.272*	-0.509**	-0.417**	-0.422**	-0.616**
Intimacy	-0.336**	-0.430**	-0.312**	-0.242*	-0.396**	-0.447**	-0.354**	-0.548**
Total family score	-0.545**	-0.569**	-0.416**	-0.349**	-0.626**	-0.556**	-0.541**	-0.793**

Note: * $P<0.05$ ** $P<0.01$ is statistically significant

3. Discussion

3.1 Patients with CHD have poor sleep quality

In this study, 99 people had sleep quality problems ($PSQI > 7$), accounting for 60.4% of the total number of people, and 65 people did not have sleep quality problems ($PSQI \leq 7$), accounting for 39.6%. As a result, most patients with CHD have sleep quality problems, and the results are higher than the other studies. Among them, the median score of total sleep quality was 9 points, and the quartile (6, 12) score was at a moderate level, which was basically consistent with the results obtained^[5].

3.2 The level of family care for patients with CHD is low

This study showed that the median family care for patients with coronary heart disease was 6.5 points, and the quartile (4, 8) scores. Among them, 82 cases (50%) had good family function, 58 cases (35.4%) of moderately disabled patients, and 24 cases (14.6%) of severely disabled patients, indicating that the level of family care of patients with CHD was not good, lower than that of research conclusion of Riying Hou et al^[6]. Family functioning can have an impact on the health of members.

3.3 Correlation between sleep quality and family care in patients with CHD

Logistic regression analysis showed that home care had an effect on sleep quality. The results of The Spearman correlation analysis method showed that the sleep quality of patients with CHD and the five dimensions and the total score of family care were negatively correlated ($P < 0.01$), that is, the higher the level of family care in patients with CHD, the better the sleep quality. This result is similar to that of research conclusion of Weiling Lü^[7].

Overall, the sleep quality of patients with coronary heart disease is not optimistic, and the level of family care is low. Care and family members can improve the quality of sleep in patients with coronary heart disease by improving family function.

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Analysis of Sleep Quality and Oral Health Quality of Elderly Diabetic Patients Through Multi-Mode Health Education

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Abstract: Objective: To analyze the effects of multimodal health education on sleep quality and oral health quality of elderly patients with diabetes mellitus. **Methods:** From June 2020 to August 2021, 80 elderly patients with diabetes diagnosed and treated in our hospital were analyzed, and 40 cases were grouped by random lottery method. The basic group received routine health education, and the practice group received multi-mode health education, comparing the sleep quality level, oral health quality of life, and satisfaction of the two groups. The sleep quality and oral health quality of life scores of the practice group were lower than those of the basic group, and the satisfaction of the practice group was higher than that of the basic group, and the $P < 0.05$, with statistical significance. **Conclusion:** more. Model health education can effectively improve the sleep quality of elderly patients with diabetes and improve the quality of oral health and quality of life of patients, which is worthy of reference.

Keywords: Elderly Patients; Diabetes; Multi-Modal Health Education; Sleep Quality; Oral Health

Introduction

Diabetes is a common type of chronic disease that is more common in older people. With the gradual deepening of the aging of the population, the incidence of diabetes has further increased, which has been affected by physiological health, resulting in a significant decrease in the sleep quality of elderly diabetic patients and a serious impact on the physical and mental health of the body [1]. Over the years, with the continuous establishment of the - model, medical services have changed from simple disease diagnosis and treatment to psychological services and social services, paying more attention to the physical and mental health of elderly diabetic patients. - The routine nursing service model is often difficult to meet the growing nursing needs of patients at this stage. Multi-mode health education has emerged, multi-mode health education can ensure that patients can obtain more correct disease knowledge in a short period of time, so as to promote the continuous improvement of patients' cognitive level [2-3]. To this end, 80 elderly patients with diabetes were selected for this study, and the results are reported below.

1. Information and methods

1.1 Basic Information

From the analysis of 80 elderly patients with diabetes diagnosed and treated in our hospital, the study was carried out from June 2020 to August 2021, and they were grouped by random lottery method, $n=40$. There were 20 males and 20 females in the base group; the highest age was 79 years, the lowest age was 60 years, the age was mean (70.24 ± 1.36) years,

and the course of the disease ranged from 1 year to 10 years, the mean (5.78 ± 1.02) years. In the practice group, there were 21 males and 19 females; the highest age was 81 years, the lowest was 61 years, the age was average (70.65 ± 1.42 years), and the course of the disease ranged from 1 year to 12 years, the mean (5.94 ± 1.16) years. The results of the comparison of the two sets of general data showed that the $P > 0.05$.

1.2 Methods

The basic group receives routine health education: oral health education is traditionally carried out for patients, timely answers to patients' and family questions, and homemade diabetes health education manuals are distributed to patients and their families, and patients are instructed to read on their own.

The practice group receives multi-modal health education: (1) Establish a health education team: a health education team composed of medical staff regularly conducts pictured and textual health education for patients through multimedia centralized publicity, and at the same time distributes health education brochures to patients to improve patients' interest in receiving publicity and education knowledge. (2) Application of insulin pen: Medical staff personally demonstrate the correct application method of insulin pen for patients, correct patients' wrong cognition and wrong use methods, etc., actively strengthen diet management education for patients, and explain the knowledge of disease diet for patients in the form of food and energy equivalent exchange, so that patients can more intuitively understand the correct way of eating different foods, and effectively improve patients' participation and sense of experience, and answer the questions raised by patients in detail. Explain the benefits of blood glucose monitoring to patients. (3) Health information files: Establish health data files, real-time monitoring and recording of specialized examinations and blood glucose changes, etc., so that patients can control blood sugar into daily goals that need to be completed, and record and improve patient disease treatment information. (4) Disease exchange meeting: Organize exchange meetings for diabetic patients every year, invite those with good blood glucose control and good self-management ability to share their experiences, mainly including medication, diet and exercise, etc., to further promote communication and exchange between patients and improve patient compliance.

1.3 Observation indicators

(1) The Pittsburgh Sleep Quality Evaluation Index was used to evaluate sleep quality, with a total score of 21 points, and the lower the score, the higher the patient's sleep quality. At the same time, the elderly oral health quality of life evaluation index was applied to evaluate the quality of oral health of the two groups, including 4 dimensions, and the 5-level scoring method was implemented to score, the score was 0-15 points, and the higher the score, the worse the oral quality of life. (2) Evaluate with a self-made satisfaction scale, including special satisfaction, basic satisfaction, and dissatisfaction.

1.4 Statistical analysis

The SPSS27.0 statistics tool is used as a research data processing tool, and the score data is tested with t to ($\bar{x} \pm s$) indicates that satisfaction data is tested by chi-square, expressed in composition ratios, and has statistical analytical significance: $P < 0.05$.

2. Results

2.1 Comparison of sleep quality and oral health quality of life between groups

The sleep quality score and oral health quality of life score of the practice group were significantly lower than those of the basic group, and the $P < 0.05$. As shown in Table 1.

Table 1 Comparison of sleep quality and oral health quality of life in the two groups ($\bar{x} \pm s$)

The group name	n	Sleep quality score (points)		Oral Health Quality of Life (points)	
		Before care	After care	Before care	After care
Practice Group	40	13.31±1.26	4.27±1.51	10.54±1.27	3.26±1.04
Base group	40	13.28±1.31	7.44±1.62	10.62±1.35	5.36±1.17
t	-	0.104	9.052	0.272	8.484
P	-	0.917	0.000	0.785	0.000

2.2 Compare the satisfaction levels between groups

The satisfaction of nursing services in the practice group was significantly higher than that in the basic group, with a $P < 0.05$. As shown in Table 2.

Table 2 Comparison of satisfaction levels between the two groups [n(%)]

The group name	Number of examples	Particularly satisfied	Basically difficult	dissatisfied	Total satisfaction
Practice Group	40	20 (50.00)	17 (42.50)	3 (7.50)	37 (92.50)
Base group	40	16 (40.00)	14 (35.00)	10 (25.00)	30 (75.00)
χ^2	-	-	-	-	4.500
P	-	-	-	-	0.033

3. Discussions

Diabetes is a lifelong disease type, high incidence in the elderly, its blood glucose compliance rate is low, low control rate, low cholesterol, it is very easy to cause systemic inflammatory response and local inflammation, will have a serious impact on the physical and mental health of patients, reduce the quality of life and sleep quality of patients [4]. Because most elderly patients have a relatively low awareness of diabetic disease knowledge, it is very easy to cause them to not comply with medical drugs due to the influence of various factors, which adversely affects the treatment effect of the disease. Effective interventions need to be actively pursued to further improve the overall quality of interventions [5].

Multi-mode health education can take patients as a nursing center, fully take into account physiological functions, patient differences, training environment and other factors, in the process of targeted health education for patients, through multimedia continuity interaction and other diversified modes, health education for patients, improve patients' disease knowledge awareness, improve patient cognitive level, further promote patients to actively participate in the health management process in daily life, let patients self-correct poor lifestyle, improve patient compliance with medical drugs, Effectively improve the effect of blood glucose control in patients and reduce the risk of complications. Carrying out multi-mode health education can effectively improve patients' daily self-management ability and learning ability, and it is necessary to fully apply the knowledge learned in daily life, improve patients' enthusiasm for participation, and effectively control patients' disease progression [6]. The results of this study show that the sleep quality score and oral health quality of life score of the practice group were significantly lower than those of the basic group, with a $P < 0.05$; the satisfaction of nursing services in the practice group was significantly higher than that of the basic group, with a $P < 0.05$.

In summary, the implementation of multi-mode health education for elderly diabetic patients can effectively improve the sleep quality and oral health quality of patients, so that patients' satisfaction with nursing services is significantly improved, which is suitable for promotion.

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