

Sigma's 30th International Nursing Research Congress

The Associated Factors of Foot Lesion and Foot Self-Care Behaviors in Hemodialysis Patients

Te-Fen Lee, PhD

nursing department, Ching Kuo Institute of Management and Health, keelung, Taiwan

Purpose:

This study aimed to investigate the foot lesions and food self-care behaviors of patients undergoing hemodialysis.

Methods:

This correlational study used purposive sampling to enroll subjects, and used foot testing tool and structured questionnaire to collect the data of dependent variables.

Results:

I .Basic Attributes of the Research Subjects

Demographic characteristics: This study enrolled 112 patients undergoing hemodialysis, with 63 male patients and 48 female ones. The average age of patients was 66.03 years old. Most of the patients were unemployed. Most of them lived with family members (86.6%) and economic status was good (75%). 90.2% of patients did not have a smoking habit.

Disease characteristics: The average number of years of dialysis was 5.08 years. 95.5% of patients underwent dialysis 3 times per week, 46.4% of them suffered from diabetes and 98.2% of them had never learned foot care.

Physiological indices: white blood cells, serum albumin, and cholesterol of most of the patients were normal, and as many as more than 50% of patients experienced abnormalities in hemoglobin, blood phosphorus, and glycated hemoglobin.

II. Current Status of Foot Lesion and Foot Self-care Behaviors of Research Subjects

1. Foot lesion

Foot lesions status distribution: the appearance of foot skin abnormalities total of 106 people (94.6 percent), up to dryness (86.6%), followed by skin cracking (38.4%) and hard cocoon (38.4%); abnormal structural appearance were a total of 82 people (73.2 percent), gray toe nail maximum (34.8%), followed by 12.5% of wounds. Peripheral vascular assessment component: abnormal peripheral vascular disease 100 (61.4%), ankle brachial pressure index abnormalities in 79 (70.5%). Peripheral nerve assessment: palpation of the posterior tibial artery abnormalities 45.6%, peripheral nerve abnormalities in 53 (59.70%).

2. Foot self-care behaviors

The total score of the scale on foot self-care was 90 points, the average score was 61.1, points, the highest score was 83 points, and the lowest score was 39 points.

III. Correlation between Foot Lesion and Foot Self-care Behaviors

There was not a statistical correlation between foot lesion and foot self-care behaviors of patients undergoing hemodialysis.

IV. Influence Basic Attributes on Foot Lesion and Foot Self-care Behaviors

For basic attributes, the differences in weekly number of times of dialysis, Hb value, serum albumin, calcium phosphate product, cholesterol, and triglyceride did not lead to a statistical difference in foot lesion and foot self-care behaviors.

Application of Nursing Profession

This study suggested that, school formative education should include the evaluation of patients' foot lesion and foot care into teaching issues to promote foot care of patients undergoing dialysis. This study also suggested that, clinical practical care should use the screening tests of nerves, blood vessels, skin appearance, and structure to discover patients with foot abnormalities and archive them for management to prevent the crisis of amputation.

Conclusion:

The proportion of patients receiving the instruction of foot care in this study was lower. However, many patients experienced abnormalities in blood vessels and nerve evaluation. There was not a statistical correlation between foot lesion and foot self-care behaviors of patients undergoing hemodialysis.

Title:

The Associated Factors of Foot Lesion and Foot Self-Care Behaviors in Hemodialysis Patients

Keywords:

foot lesion, foot self-care behaviors and hemodialysis,

References:

Jane O. Schell, Renee.Bova-Collis, & Nwamaka D. Eneanya. (2014). An Interdisciplinary Approach to Dialysis Decision-Making in the CKD Patient With Depression. *Advances in Chronic Kidney Disease*, 21 (4) , 385-391.

Janice A, Neil Carolyn J. Knuckey Robert J. Tanenberg (2003) Prevention of Foot Ulcers in Patients with Diabetes and End Stage Renal Diseas. *NEPHROLOGY NURSING JOURNAL*, 30 (1) , 39-43.

Kaminski, N. Frescos and S. Tucker (2011) . Prevalence of risk factors for foot ulceration in patients with end-stage renal disease on haemodialysis. *The Authors Internal Medicine Journal 2011 Royal Australasian College of Physicians*, 120-128.

Picariello, F., Moss-Morris, R., Macdougall, I. C., & Chilcot, A. J. (2017). The role of psychological factors in fatigue among end-stage kidney disease patients: a critical review. *Clin Kidney J*, 10(1), 79-88. doi:10.1093/ckj/sfw113

Ribeiro, A. S., Schoenfeld, B. J., Souza, M. F., Tomeleri, C. M., Silva, A. M., Teixeira, D. C., . . . Cyrino, E. S. (2017). Resistance training prescription with different load-management methods improves phase angle in older women. *Eur J Sport Sci*, 17(7), 913-921. doi:10.1080/17461391.2017.1310932

Yi-chun.Tsai, Yi-wen.Chiu, Chi-Chih.Hung,Shang-Jyh.Hwang,Jer-Chia. Tsai, Shu-Li.Wang,RN Ming-Yen.Lin, & Hung-Chun.Chen. (2012) *Association of Symptoms of Depression With Progression of CKD.Am J Kidney Dis*, 60 (1).54-61.

Abstract Summary:

The lesions of peripheral blood vessels and nerves of food of hemodialysis patients may induce foot amputation which risk of amputation can be reduced by strengthening foot self-care behaviors. This study used foot testing tool and structured questionnaire to collect the data of dependent variables.

Content Outline:

Research Background and Motives

Research Method

Research Results

I. Basic Attributes of the Research Subjects

Demographic characteristics

Disease characteristics

Physiological indices

II. Current Status of Foot Lesion and Foot Self-care Behaviors of Research Subjects

1. Foot lesion

2. Foot self-care behaviors

III. Correlation between Foot Lesion and Foot Self-care Behaviors

IV. Influence Basic Attributes on Foot Lesion and Foot Self-care Behaviors

Research Limitation

Application of Nursing Profession

I. School Nursing Education

II. Clinical Practical Care

III. Future Studies

keywords: hemodialysis, foot lesion, foot self-care behaviors

First Primary Presenting Author

Primary Presenting Author

Te-Fen Lee, PhD

Ching Kuo Institute of Management and Health

nursing department
Associate Professor
Zhongshan Dist.
Keelung
Taiwan

Author Summary: I have be a nurse on burn center and ICU for 10 years. My major training specific are nursing and development Psychology. Now I am an associate professor for 10 years working in nursing department of Ching Kuo Institute of Management and Health.