A comparison of health promoting behavior and quality of life among early stage of CKD and healthy adults in Taiwan

Hsiu-Lan Teng[1], Miaofen Yen[2]

1. Lecturer, Department of Nursing, Foo-Yin University, Kaohsiung, Taiwan
   Doctoral Student, Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, Tainan City, Taiwan.
2. Professor, Department of Nursing & Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, Tainan City, Taiwan.

Background:

Health promotion in chronic diseases patients is beneficial to both the individual and society, because it potentially extends the healthy years of life while reducing the years of disability through disease prevention. It also can increase the quality of life by delaying the effects of disease, allowing patients to engage in meaningful pursuits. However, litter research has been conducted to compare health-promoting behaviors of early stage of CKD and healthy adult.

Aim:

This study was to compare 1-3 stage of CKD and healthy adults in terms of: (a) the differences in health promoting behaviors and quality of life; (b) the relationships between health promoting behavior and quality of life.

Method

This cross-sectional study was conducted through a convenience sample of 78 CKD subjects and 87 healthy adults recruited in southern Taiwan. The Chinese version of the Health Promotion Lifestyle Profile-II (HPLP-II) was used to measure the health promotion behaviors. Quality of life was measured using Taiwan version of the WHOQOL-BREF. Independent t-tests were used to compare the means of the HPLP-II and QOL. Pearson correlation coefficient was used to measure relations between the HPLP-II and QOL.

Measurement

(1) Demographic data
(2) The Health-Promoting Lifestyle Profile-II developed by Walker (1987)
(3) The World Health Organization Quality of Life (WHOQOL)

Results

(一)Demographic Characteristics of participants:

The demographic characteristics of participant are shown in Table 1. The results showed there were no significant differences between the early stage of CKD and healthy adult groups demographic characteristics.

Table 1. Comparison of demographic characteristics of early stage of CKD and healthy adults

Variable	Early stage of CKD	Healthy adult	
	(n=78)	(n=87)	
	N(%)/Mean (SD)	N(%)/Mean (SD)	p-value
Age	49.04±9.86	46.41±7.13	.054
Gender			
Male	40(51.3%)	32(36.8%)	.061
Female	38(48.7%)	55(63.2%)	
Education			
senior high school and under	40(41.6%)	48(55.2%)	.205
college	16(18.9%)	24(27.6%)	
University and over	22(28.2%)	15(17.2%)	
Marital status			
Single/divorce/widowed	11(14.2%)	19(15.8%)	.198
Married	67(85.9%)	68(71.2%)	

(三)Comparison of quality of life on the two groups

Table 3 depicts the QOL results. QOL of CKD patients was found to be significantly impaired in comparison to QOL of healthy adults, particularly with respect to the global health and psychological domains, but not in the physical, social and environment domain.

Table 3.Comparison of quality of life of early stage CKD and healthy adults

variable	Early stage of CKD	Healthy adult	
	(n=78)	(n=87)	
	Mean (SD)	Mean (SD)	p- value
Global QOL (single item)	3.26(0.84)	3.46(0.78)	.110
Global health status(single item)	2.60(0.71)	3.20(0.78)	.001
Physical Domain	14.06(1.99)	14.69(2.32)	.65
Psychological Domain	15.50(2.73)	16.63(3.46)	.021
Social Related Domain	13.74(1.98)	14.17(2.29)	.202
Environment Domain	13.89(2.31)	13.67(2.12)	.529

(二)Comparison of Health-promoting Lifestyle Profiles on the two groups

As shown in Table 2 compares the six subscale scores on the Chinese HPLP-II for early stage of CKD and healthy adults. Results show that early CKD were higher scores on nutrition, and health adults were higher scores on spiritual growth. Otherwise, no differences were found between early CKD and healthy adult in the scores of the other subscales or in the total score.

Table 2. Comparison of early stage of CKD and healthy adults HPLP-II total and subscales score

variable	Early stage of CKD	Healthy adult	
	(n=78)	(n=87)	
	Mean (SD)	Mean (SD)	p- value
Health responsibility	2.59(0.47)	2.48(0.54)	.161
Physical activity	2.20(0.61)	2.20(0.69)	.984
Nutrition	2.79(0.43)	2.59(0.50)	.007
Spiritual growth	2.63(0.53)	2.85(0.59)	.013
Interpersonal relations	2.70 (0.50)	2.76(0.55)	.436
Stress management	2.54(0.48)	2.55(0.56)	.989
HPLP-II total	2.58(0.40)	2.58(0.46)	.942

Conclusion:

The early stage of CKD is often asymptomatic and similar to general population. The performed of healthy behaviors may be more strongly associated with QOL in the two groups.

If you have any question, please contact with *Hsiu-Lan, Teng*
mail to: ns235@fy.edu.tw