



Effect on blood pressure and interdialytic weight of planned education in patients receiving hemodialysis

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Introduction

- Interdialytic weight gain due to high fluid intake is one of the most common problems in patients receiving hemodialysis.
- On the other hand, interdialytic weight gain is also effective on blood pressure. Patient education, one of the important responsibilities of the nurse, are among effective nursing approaches to enable patients appropriate their behaviors, and improve their ability, knowledge, and awareness.

Purpose

- This study was conducted for examining the effect on interdialytic body weight (IDWG) and blood pressure (BP) of planned education related to salt and fluid restricted diet given to patients undergoing hemodialysis.

Methods

- The method of the study was a randomly controlled clinical trial. A sample of 100 individuals participated, of which 50 were in the Experimental group (EG) and 50 were in the Control group (CG).



Methods

Diet education, including face to face training with instruction booklets, were conducted in the three sessions.

Having carried out the educational program, BP and IDWG were measured and recorded by researcher-designed checklists.

Methods

- Effects of the education were evaluated by the tests carried out monthly in the clinical biochemistry laboratory of the hospital.
- Analyses were performed using SPSS version 22.0 statistical software.
- The study was approved by the research Ethics Committee of the Cumhuriyet University Hospital. Written informed consent was provided by all patient participants prior to entry into the study.

Table 1: Sociodemographic and clinical characteristics of the HD patients

	EG*	CG**	p value
Age (years); mean±SD	52.6 ± 16.3	51.3 ± 16.7	.066
Gender; n(%)			
Male	26 (52.0)	28 (56.0)	0.68
Female	24 (48.0)	22 (44.0)	
Educational status; n(%)			
Literate	10 (20.0)	8 (16.0)	0,86
Primary school	29 (58.0)	30 (60.0)	
Secondary and tertiary	11 (22.0)	12 (24.0)	
Duration of illness (years) ; n(%)			
≤1	8 (16.0)	10 (20.0)	0.96
2–5	20 (40.0)	19 (38.0)	
6–10	12 (24.0)	11 (22.0)	
≥11	10 (20.0)	10 (20.0)	
HD frequency; n(%)			
Two times/week	13 (26.0)	11 (22.0)	0.34
Three times/week	37 (74.0)	39 (78.0)	
Has another chronic illness; n(%)			
Yes	35 (70.0)	37 (74.0)	0.65
No	15 (30.0)	13 (26.0)	



Table 1: Comparison of some parameters in pre-education and post-education stages in Experimental Group (EG) and Control Group (CG).

	Pre-Education		t-test	Post-Education		t-test
	<u>EG (n:50)</u> X±SD	<u>CG (n:50)</u> X±SD		<u>EG (n:50)</u> X±SD	<u>CG(n:50)</u> X±SD	
Creatinine	9.04±2.79	9.16±2.77	t:0.042 p:0.83	8.1±3.33	6.08± 2.91	t: 3.22 p:0.001
BUN	83.48± 6.96	83.54± 7.72	t:0.72 p:0.398	81.32± 8.53	82.38± 7.18	t:1.80 p:0.182
Systolic BP	135.8 ± 14.98	136.4 ± 15.3	t:0.12 p:0.729	127.0 ± 10.89	136.3 ± 15.43	t: 9.910 p:0.002
Diastolic BP	85.94± 7.85	86.46±8.29	t: 1.49 p:0.224	81.78± 7.25	83.52 ±9.02	t:4.54 p: .0036
IWDG	3.50 ± 0.93	3.46± 0.97	t: 0.138 p:0.711	2.74± 0.63	3.28± 0.92	t:8.329 p: 0.005

Conclusion

- At the end of the three sessions, there was a important fall down in BP and IDWG mean values for the Experimental group.
- Besides, this study defines that the client-centered, self-care focused intervention that is given by nurses to patients undergoing hemodialysis can also help achieve and maintain normal BP and IWDG.

Conclusion

- Based on these results, it is recommended that continuous planned education be given to HP to achieve and maintain normal interdialytic body weight and blood pressure.



Thank You!

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