Influence of autonomy motivation on self-management behavior and recognition in dialysis patients.

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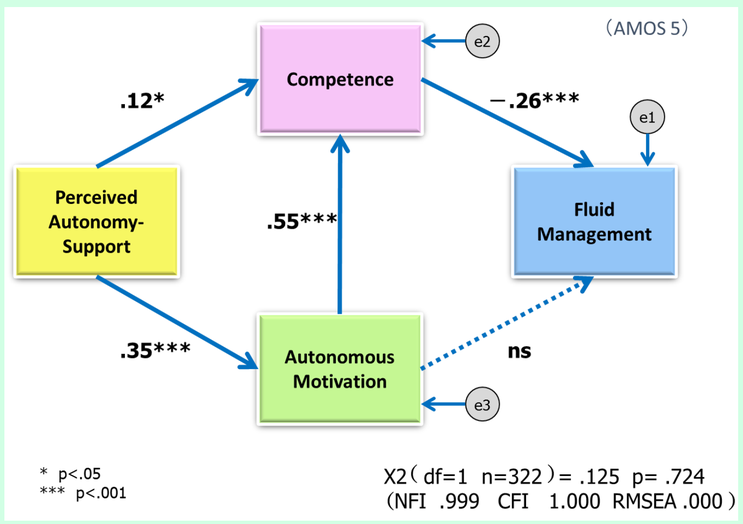
Background

Self-determination theory (SDT) (Deci & Ryan, 2000) proposes a comprehensive framework for human motivation in various domains. SDT explains the difference between " intrinsic motivation" and "extrinsic motivation" and the different ways extrinsically motivated behavior is regulated.

Organismic Integration Theory (OIT), as a sub-theory of SDT, describes two kinds of external motives, which are different in terms of relative autonomy. "Autonomous motivation" and " Controlled motivation".

Autonomous motivation in SDT is known to encourage self-management behavior through the feeling of competence(Yamamoto,2011). In each person, however, there is a mixture of various motivations. This points to a need for examination that is not confined to autonomous motivation but also embraces controlled motivation.



Yamamoto & Okumiya,2011

Objectives

The purpose of this study is to clarify the nature of the influence exerted by the state of dialysis patient motivation on management behavior, coping strategy and the quality of life.

Methods

Anonymous, self-administered questionnaires were obtained from 250 patients from 9 institutes in Japan who were on dialysis regularly.

- **Treatment Self-Regulation Questionnaire** (TSRQ)

The TSRQ is a set of questionnaires concerning why people engage in some health-relevant behavior. In this study we used modified TSRQ for fluid management of dialysis patients. There are three subscales to the scale: the autonomous regulatory style (autonomous motivation); the controlled regulatory style (controlled motivation); and amotivation (unmotivated).

- **the Stress and Coping Inventory** (SCI)

The SCI was designed to gather stress and coping information from an individual. It evaluates two strategies of stress coping behavior and eight coping type profiles.

- **the Kidney Disease Quality of Life** (KDQOL-SF)

KDQOL-SF is a short form scale to measure the quality of life of patients with kidney disease by self-reporting method.

- **Demographic data**

sex, age, primary diagnosis(cause of renal failure), length of time on dialysis, weight growth rate from dry weight

Results

Participant's demographic data is shown in Table 1.

The score average of autonomous motivation was 37.72 points (standard deviation was 7.13), controlled motivation was 17.29 points (standard deviation was 7.62).

So, we classified autonomous motivational subscale scores of 30 or higher as high degree group, controlled motivational subscale scores of 18 or higher as high degree group. Then, we created four groups using this high and low degree. (See table 2)

We compared differences in mean values of demographic data, SCI and KDQOL among these four groups using one-way analysis of variance. (SPSS Statistics ver.23)

In the group with high degree of autonomous motivation and low degree of controlled motivation, there was little increase in weight (the management status was favorable) . In addition, this group was characterized by a long dialysis history , use of diverse methods for coping (problem focused coping strategy, Positive evaluation coping strategy) , high degree of “mental health” , and high degree of “patient satisfaction” with care .

Table 1 Participant demographics

Demographics	Item	n	%
Sex	male	174	69.6
	female	73	29.2
	no answer	3	1.2
Primary diagnosis (cause of renal failure)	Diabetes	70	28.0
	Others	180	72.0
Age (average)		62.87±11.83 years	
Length of time on dialysis (average)		11.35±9.14 years	
Weight growth rate from Dry Weight (average)		11.72±3.97 %/week	

Table 2 One-way analysis of variance by motivation type

Type of motivation	n	increase in weight	Length of time on dialysis	SCI (coping strategy)		KDQOL	
				Problem focused	Positive evaluation	Mental health	Patient satisfaction
		%	year	points	points	points	points
High autonomous motivation Low controlled motivation	57	10.82±3.26	15.35±10.17	30.15±11.07	9.20±3.91	77.96±18.24	79.08±15.77
High autonomous motivation High controlled motivation	75	11.38±4.03	9.76±8.99	27.51±12.39	8.55±4.24	72.93±20.41	82.13±18.88
Low autonomous motivation High controlled motivation	51	13.03±3.66	10.20±9.16	20.83±12.51	6.23±3.47	64.89±19.21	74.82±20.43
Low autonomous motivation Low controlled motivation	67	12.15±3.63	10.84±7.68	21.19±12.08	5.83±3.68	69.80±18.46	71.27±24.90
One-way ANOVA F- and p-value		F=3.758 P=0.011	F=4.679 P=0.003	F=4.165 P=0.008	F=5.509 P=0.001	F=4.201 P=0.006	F=3.564 P=0.015

One-way analysis of variance Bonferroni post-hoc test * p < 0.05 **p < 0.01

Conclusion

Patient cognition of self-management motivation with a balance between a degree of the autonomous and the controlled was related to favorable self-management behavior and a better quality of life. From this study, it was revealed that the most favorable balance is high autonomous motivation and low controlled motivation. SDT has identified three psychological needs to development of optimal motivation and personal well-being; the need for Autonomy, Competence and Relatedness. So, supporting patients’ autonomy fulfills these needs and promotes their autonomous motivation.

In order to enable patients to obtain autonomous motivation, there is a need for nursing to support patient's autonomy and internalize self-management behavior.

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