



Caring together

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Conference Theme: **Quality versus Cost
Sustainable Renal Care**

Associations between appetite and quality of life or performance status in haemodialysis patients

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Presentation outline

1 Introduction

2 Objectives

3 Methods

4 Results

5 Conclusions

Introduction

The concept of Chronic Kidney Disease (CKD) describes a progressive and irreversible worsening of renal function of a person. ¹

CKD is characterized by a slow and progressive loss of renal excretory capacity, due to the gradual reduction of glomerular filtration main excretion of toxic solutes produced by the body. ¹

¹ Durvasula, V., Himmelfarb, J. (2011). Chronic renal failure and dialysis. ACP Medicine.

Introduction

This disease presents a set of clinical manifestations, such as, loss of appetite with decreased taste, changes in sleep patterns, including insomnia and daytime sleepiness. ¹

Malnutrition, inflammation, and atherosclerosis often coexist among patients with CKD, and each of these risk factors independently predicts outcome in these patients.²

¹ Durvasula, V., Himmelfarb, J. (2011). Chronic renal failure and dialysis. ACP Medicine.

² Stenvinkel, P.; Heimbürger, O.; Lindholm, B.; Kaysen, G. (2000). *Are there two types of malnutrition in chronic renal failure? Evidence for relationships between malnutrition, inflammation and atherosclerosis (MIA syndrome)*. Nephrol Dial Transplant, 97-109.

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1 Introduction

2 Objectives

3 Methods

4 Results

5 Conclusions

Objectives

- **To investigate the association between appetite and kidney disease specific quality of life performance status in haemodialysis patients.**

Presentation outline

1 Introduction

2 Objectives

3 **Methods**

4 Results

5 Conclusions

Methods

- **91 people (46 were males) who undergo haemodialysis participated in this cross sectional study.**
- **Data collection included the questionnaire KDQOL version 1.3 (Kidney Disease Quality of Life) and the Karnofsky Performance Status Scale.**

Methods

- **Nutritional status was assessed by collecting blood samples including haemoglobin, serum albumin, creatinine, urea, c-reactive protein, calcium, phosphorus.**
- **Appetite was assessed by questionnaire.**

Methods

Statistical analysis

Descriptive statistic	x
Coefficient of Pearson and Spearman	x
Mann-Whitney test	x
Anova	x
Linear regression	x

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1 Introduction

2 Objectives

3 Methods

4 Results

5 Conclusions

Results

Characteristics of the participants

	Sex	N	Mean	SD	<i>p</i> value
Age ^{a)}	Male	46	62,67	16,38	.460
	Female	45	64,49	16,9	
Karnofsky ^{a)}	Male	45	,69	,16	.018
	Female	44	,59	,18	
Education ^{a)}	Male	46	4,80	3,41	.035
	Female	45	3,38	2,90	
Dialysis time (months) ^{a)}	Male	44	53,61	45,68	.044
	Female	45	75,89	56,44	
SF-12 Physical Composite ^{b)}	Male	45	37,87	7,69	.106
	Female	42	34,98	8,78	
SF-12 Mental Composite ^{b)}	Male	45	44,49	9,70	.011
	Female	42	39,32	8,66	

a)Mann-Whitney Test

b) teste – T

Results

Linear regression for Karnofsky according to appetite

Appetite	Karnofsky		
	Beta	95% CI	P value
Good appetite	.124	.013;.236	.029
Average appetite	.063	-.055;.182	.297
Poor appetite	(reference)	-	-

95% CI – 95% Confidence interval

Results

Biochemical markers of nutritional and inflammatory status according to appetite

	Good Appetite (n=48)	Average Appetite (n=28)	Poor appetite (n=12)
Hemoglobin (g / dl)	12.24 (1.54)	11.99 (1.26)	11.90 (1.05)
Serum albumin	4.02 (0.312)*	3.83 (0.27)	3.71 (0.41)*
Creatinine	8.61 (2.75)	7.61 (2.27)	6.92 (2.015)
Urea	135.16 (38.93)*	107.81 (28.62)*	117.25 (28.17)
Dry weight	65.63 (11.73)	66.24 (17.16)	61.52 (10.51)
C-reactive protein	10.31 (14.68)	12.39 (12.63)	17.84 (39.55)
Calcium	8.92 (0.92)	8.79 (0.66)	8.56 (0.42)
Phosphorus	4.4. (1.93)	4.312 (1.66)	3.78 (0.85)

*ANOVA. Test - The mean difference is significant at the 0.05 level.

Results

Physical quality of life according to appetite

Appetite	Quality Physical Life			
	β^\dagger	95% CI	<i>p value</i>	R
Good Appetite	5.35	0.132;10.621	0.044	0.510
Moderate Appetite	3.075	-2.283;8.426	0.261	
Poor Appetite	(reference)	-	-	

† Adjusted for sex, age, duration of dialysis, Kt / v balanced, appetite, dietary restriction, calcium, phosphorus.
95% CI – 95% Confidence interval

Results

- **It was found a positively correlation between appetite and Physical Health ($p=0.009$), even after controlling for confounders ($p=0.044$).**
- **Appetite and Karnofsky were positively correlated ($p<0.001$).**
- **More, it was found a correlation between appetite and serum albumin and urea.**

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1 Introduction

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3 Methods

4 Results

5 Conclusions

Conclusions

- **This study contributes to further support experimental studies to improve quality of life in haemodialysis patients.**



Thank You Very Much for Your Attention!

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