

## MO898 COMPARISON OF QUALITY OF LIFE AND BIO-PSYCHOSOCIAL BURDEN IN FAMILY CAREGIVERS BETWEEN DIALYSIS PATIENTS AND KIDNEY TRANSPLANT RECIPIENTS

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F	KTRs caregiversDialysis caregiversP-value		
SF-36			
General health	$78.6 \pm 19.1$	$63.6\pm25.8$	< 0.001
Bodily pain	$87.5\pm20.3$	$77.6\pm26.3$	.04
Social role functioning	$68.2 \pm 29.7$	$56.5\pm29.9$	.04
Physical role functioning SF-12	$51.8\pm8.1$	$50.3\pm10.46$	.44
Mental role functioning SF-12	$46.6\pm11.9$	$41.6\pm13.3$	.051
ZBI			
Total burden	$30.5\pm15.6$	$39.8 \pm 17.6$	.006
Personal strain	$11.7\pm6.7$	$16.6\pm7.9$	.001
Role strain	$8,9 \pm 4,4$	$11.3\pm5.5$	.02
Relational deprivation	$6.7\pm4.4$	$8.7\pm4.5$	.03
Management of care	$3.1\pm1.4$	$3.2\pm1.7$	.92

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**BACKGROUND AND AIMS:** Chronic kidney disease (CKD) is considered as a high-stress disease for patients, because of severe morbidity, chronicity and its life-long treatment often requiring dedicated family care. Caregivers' burden is considered a multidimensional bio-psychosocial reaction of great importance both for caregivers' and CKD patients' Quality of Life (QoL). Kidney transplantation (KT) has been shown to improve patient's QoL, however the effect of KT on family's burden in comparison with dialysis has not been sufficiently studied. Aim of this cross-sectional, multicentre, observational study was to estimate and compare the QoL and burden between family caregivers of dialysis patients versus KT recipients (KTRs).

**METHOD:** We included 138 caregivers of dialysis patients and 33 of KTRs. We assessed caregivers' QoL with SF-36 questionnaire and bio-psychosocial burden with Zarit Burden Interview scale (ZBI).

**RESULTS:** Mean age of caregivers did not differ between the two groups (56y dialysis versus 58y KTRs). The majority of KTRs (57.6%) and dialysis patients' caregivers (68.1%) were women of whom 73% and 52% were spouses, respectively. Educational level and financial status did not differ between the two groups of caregivers. The results of the SF-36 and ZBI are comparatively presented in the Table 1.

Dialysis patients' caregivers had worse QoL compared with KTRs caregivers. There was a statistically significant difference in general health, bodily pain and social functioning role among KTRs versus dialysis caregivers. Dialysis caregivers showed a significantly higher burden in 3 sub-dimensions of ZBI (personal strain, role strain, relational deprivation) compared with KTRs caregivers. Moreover, the burden of KTRs caregivers, older age, female gender and low income were directly associated with burden (P = 0.01), while in dialysis caregivers, older age, female gender and low income were directly associated with burden (P < 0.001, P = 0.019 and P = 0.005, respectively). **CONCLUSION:** The caregivers of dialysis patients showed worse QoL and

significantly higher burden compared with KTRs caregivers. Further studies of larger size will probably shed light to the potential benefits of KT in patients' caregivers and families. Currently, implementation of programs for psychological support in high burdened caregivers of kidney disease patients' could be of help.

## MO899 THE CLINICAL FRAILTY SCALE IS USEFUL FOR ICU TRIAGE IN DIALYSIS PATIENTS WITH COVID-19-AN ERACODA ANALYSIS

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**BACKGROUND AND AIMS:** during the COVID-19 pandemic, several guidelines have recommended the use of the Clinical Frailty Scale (CFS) for triage of critically ill patients with COVID-19 in case of shortage in ICU resources. However, no data on

using CFS assessment for ICU triage for dialysis patients is yet available. This study evaluates whether CFS is associated with mortality rates in a cohort of hospitalized dialysis patients with COVID-19.

**METHOD:** the analyses are based on data of the European Renal Association COVID-19 Database (ERACODA). Dialysis patients who presented with COVID-19 between 1 February 2020 and 30 April 2021 and with complete information on CFS and vital status at 3 months were included. Study outcomes were hospital and ICU admission rates and hospital and ICU mortality at 3 months after hospital admission. Cox regression analyses were performed to assess the association of CFS category ( $\leq$ 5 versus  $\geq$  6) and study outcomes in line with Dutch ICU triage guidelines for COVID-19. Furthermore, additional subgroup analyses were performed to assess the association between CFS and 3-month mortality by age category (<65, 65–75 and >75 years).

**RESULTS:** among a total of 2206 dialysis patients (mean age = 67.2 (14.1) years, male sex = 61%), 1694 (77%) had CFS  $\leq$  5 and 514 (23%) had CFS  $\geq$  6. Hospitalization rate was comparable in patients with CFS  $\leq$  5 and in patients with CFS  $\geq$  6 (67 and 71%, respectively), whereas the rate of ICU admission was higher in patients with CFS  $\leq$  5 than in patients with CFS  $\geq$  6 (16 versus 9%, p = 0.001). Among 1501 hospitalized patients, 3-month mortality was 26% of patients with CFS < 5 and 59% in patients with CFS  $\geq$  6 (*P* < 0.001). Multivariate analysis with adjustment for patient demographics, smoking status and BMI revealed that  $CFS \ge 6$  was associated with hospital mortality [aHR 2.27 (1.88–2.74) versus CFS  $\leq$  5; P < 0.001) with a significant interaction for age (P = 0.029). aHR was 4.00 (2.56–6.37; CFS  $\geq$  6 versus CFS  $\leq$  5; P < 0.001 in patients < 65 years, aHR was 1.87 (1.33-2.64; CFS > 6 years, CFS < 5; P < 0.001) in patients 65–75 years and aHR was 2.12 (1.64–2.75; CFS  $\ge$  6 versus CFS < 5; P < 0.001) in patients >75 years. Among 219 ICU admitted patients, 3month mortality was 60% of the patients with CFS  $\leq$  5 and 91% in the patients with  $CFS \ge 6$ , respectively. Multivariate analysis with adjustment for patient demographics, smoking status and BMI revealed that CFS ≥ 6 was associated with ICU mortality [aHR 1.80 (1.17–2.77); CFS  $\geq$  6 versus CFS  $\leq$  5; P = 0.002].

**CONCLUSION:** more frail dialysis patients with CFS  $\geq$  6 who are hospitalized for COVID-19 were less often admitted to the ICU, but in case they were admitted to the ICU they have a very high mortality of 91% in this cohort study. In fit to mildly frail dialysis, patients who were admitted to the ICU, mortality rates are lower. The association between frailty and hospital mortality is interacted by age with the strongest association in patients younger than 65 years. These findings suggest that CFS may be a useful complementary triage tool for ICU admission of dialysis patients during the ongoing COVID-19 pandemic.

## MO900 DIURETIC PRESCRIPTION PATTERNS IN HAEMODIALYSIS PATIENTS: INTERNATIONAL VARIATION REPORTED IN THE DOPPS

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**BACKGROUND AND AIMS:** Loop diuretic use during maintenance haemodialysis (HD), including use of very high doses in Europe, is thought to maintain diuresis and reduce interdialytic weight gain, but is based on little evidence, with impact on clinical outcomes unclear. To help better inform international therapeutic strategies, we investigate regional variation in loop diuretic use and dosing strategies. **METHOD:** This study included 71 756 HD patients from the international Dialysis Outcomes and Practice Patterns Study (DOPPS) phases 2–5 (2002–15), including 27 759 patients with dialysis vintage (time since HD initiation) <1 year. We report the proportion of patients in each country prescribed a diuretic (loop, thiazide or other) by dialysis vintage. Among patients with vintage <1 year at enrollment and prescribed a loop diuretic, we report the distribution of loop diuretic dose (mg/day) by country. Doses of torsemide (4:1) and bumetanide (80:1) were converted to oral furosemide-equivalent dose.

**RESULTS:** Diuretic use varied widely by country, ranging at vintage < 3 months from >80% in Germany and Sweden to < 35% in the US, Spain, and Gulf Cooperation Council (GCC) countries (Figure 1). The proportion of patients prescribed a diuretic decreased with dialysis vintage in all countries. At vintage >5 years, diuretic use was 30%–35% in Germany and Sweden and < 20% in other countries. In all countries, >90% of diuretic prescriptions were for loop diuretic. Loop diuretic dose varied widely across countries. Among patients with vintage < 1 year, median dose ranged from 400–500 mg/day in Belgium, France, Germany and Sweden to < 100 mg/day in the GCC, Japan, Spain and the US (Figure 2).

**CONCLUSION:** We observed substantial international differences in diuretic prescription patterns to HD patients, with usage and doses much higher in some European countries than the US, where high-dose formulations are not available. The potential impact of diuretic prescription patterns on outcomes, including residual urine volume, volume-related complications and others should be investigated.

## Figure 1. Diuretic Rx (yes/no), by DOPPS country Stratified by dialysis vintage

