POS-539
PREVIOUS SELF-CARE KIDNEY FAILURE TREATMENT AND HOME HEMODIALYSIS TRAINING LENGTH
Morin, C*1, Laurin, LP1, Goupil, R2, Nadeau-Fredette, AC1
1Hopital Maisonneuve-Rosemont, Medicine, Montreal, Canada, 2Hopital du Sacré-Coeur de Montréal, Medicine, Montreal, Canada

Introduction: Optimal training is of utmost importance for successful home hemodialysis (HHD) and a key component of its cost-effectiveness. Training pattern varies depending of patient-, center- and modality-related factors. This study aimed to evaluate predictors of training duration, postulating that previous peritoneal dialysis (PD) patients and kidney transplant recipient (KTR) may have shorter HHD training duration.

Methods: All successfully trained HHD patients from a single academic dialysis center between January 2005 and July 2017 were included. Training duration was evaluated, from the first training session to the first independent home treatment, in a multivariable linear regression, with pre-specified adjustment for previous self-care kidney failure treatment (defined as kidney transplantation and/or PD exposure), demographic (age, sex), diabetes and year of training start.

Results: Forty-eight patients were included in this study. Of them, 17 (35%) had previous self-care kidney failure treatment including 8 (17%) with PD, 3 (6%) KTR and 6 (13%) having both previous PD and KTR. Median training time was 10.8 (8.7-13.0) weeks in patients with previous self-care treatment and 13.7 (10.7-18.9) weeks in patients without. There were no statistically significant differences in baseline characteristics, with the exception of kidney failure duration, which was longer in patients with previous self-care treatment (6.7 years, interquartile range [IQR] 3.0-13.1) than those without (0.9 years, IQR 0.30-1.76; p<0.001). In a multivariable adjusted linear regression, previous self-care kidney failure treatment was the only statistically significant predictor of shorter training duration (B coefficient -4.8, 95% CI -8.7; -0.89; p=0.02).

Conclusions: In this study, previous self-care kidney failure treatment was associated with shorter HHD training. This study enhances the need to maximize independent kidney failure therapy transitions, such as suggested in the Integrated home dialysis model.

No conflict of interest

POS-540
COVID-19 IN ESRD PATIENTS WITH RENAL REPLACEMENT THERAPIES: A SYSTEMATIC REVIEW AND META-ANALYSIS
Nopsopon, T*1, Kittrakulrat, J2, Takkavatakarn, K2, Eiamsitrakoon, T3, Kanchanabuch, T4, PONGPIRUL, K1,5,6
1Chulalongkorn University Faculty of Medicine, Department of Preventive and Social Medicine, Bangkok, Thailand; 2Chulalongkorn University Faculty of Medicine, Department of Medicine, Bangkok, Thailand; 3Thammasat University Faculty of Medicine, Department of Medicine, Pathum Thani, Thailand; 4Chulalongkorn University Faculty of Medicine, Center of Excellence in Kidney Metabolic Disorders, Bangkok, Thailand; 5Bumrungrad International Hospital, Clinical Research Center, Bangkok, Thailand; 6Johns Hopkins Bloomberg School of Public Health, Department of International Health, Baltimore, United States

Introduction: Since the emergence of the COVID-19 pandemic, patients with SARS-CoV-2 infection have been seen to have various presentations and outcomes. Several recent studies had explored the differences in characteristics and outcomes of COVID-19 in the different patient population, and some with renal complications. There is, however, no systematic review of ESRD patients with renal replacement therapies who are infected with SARS-CoV-2. We performed a

Conclusions: Short-term results of this intervention are encouraging, however, without follow-up at regular intervals, it is difficult to reach definitive conclusions. Nevertheless, based upon our positive experience in applying this MI model, we would encourage further development and testing of this tool to improve NA among dialysis patients.

No conflict of interest
systematic review to evaluate the prevalence and case fatality rate (CFR) of COVID-19 infection in ESRD patients with hemodialysis, peritoneal dialysis, and kidney transplantation.

**Methods:** Systematic search was conducted using PubMed, Embase, Scopus, Web of Science, and CENTRAL for observational studies of COVID-19 infection in ESRD patients with renal replacement therapy with prevalence or case fatality outcomes in the English language up to June 30, 2020. The meta-analysis was done using a random-effects model. Outcomes were prevalence and CFR with their estimated 95% confidence intervals. Also, global COVID-19 data were retrieved for estimating the prevalence and CFR of the general population as reference points. (Prospero CRD42020199752)

**Results:** Of 3,272 potential studies, 34 were included in the meta-analysis (20,694 ESRD patients in 12 countries). Twelve studies (19,445 ESRD patients in seven countries) reported prevalence data whereas 30 studies (9,293 in 12 countries) had case-fatality data. The pooled prevalence of COVID-19 in ESRD patients with renal replacement therapy was 3.7% (95%CI 2.7–4.8%) which was significantly higher than the global average prevalence (0.1%, 95%CI 0.1–0.1%). The overall case fatality rate in ESRD patients with renal replacement therapy was 18.0% (95%CI 13.5–22.5%) which was significantly higher than the global average CFR (5.0%, 95%CI 5.0–5.0%).

**Conclusion:** The prevalence and case fatality rate of SARS-CoV-2 infection in ESRD patients with renal replacement therapy across the globe are significantly higher than the global averages. No conflict of interest