



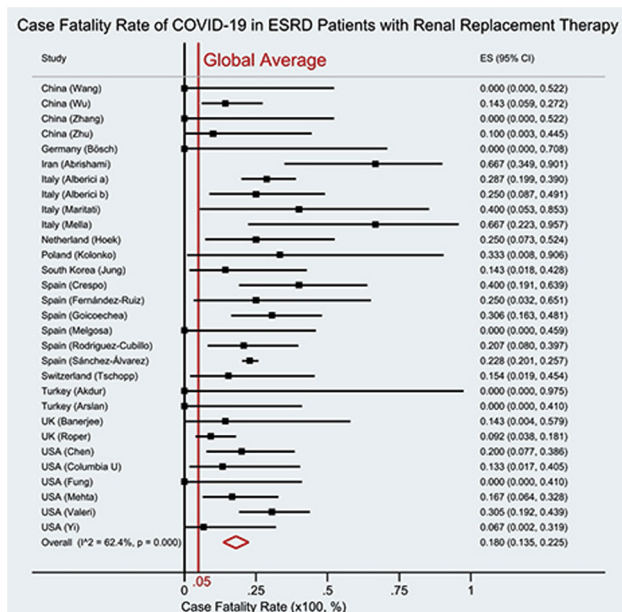
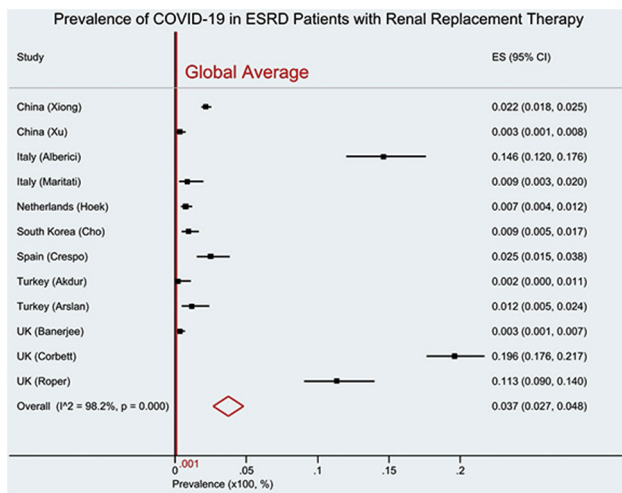
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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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 referencing 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%).



Conclusions: 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

POS-541

L COVID-19 INFECTION IN HEMODIALYSIS PATIENTS: EXPERIENCE OF NEPHROLOGY DEPARTEMENT CHU SAHLOUL



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Introduction: SARS-CoV-2 infection is challenging healthcare systems around the world. Hemodialysis (HD) patients are at increased risk for COVID-19 and its transmission due to difficulty maintaining physical distancing. There is a lack of evidence regarding the epidemiology of COVID-19 in maintenance HD patients. In this study, we describe our experience of covid 19 infection in our dialysis unit.

Methods: It is a retrospective, observational, single-center study including all positive patients managed at our COVID-19 hemodialysis unit in nephrology department of Sousse from October 1st to November 23th, 2020 as confirmed by real-time polymerase chain reaction.

We collected the clinical characteristics, laboratory investigation, treatment and evolutionary profile of COVID-19 hemodialysis patient. **Results:** A total of 20 hemodialysis patients were enrolled in the study with a mean age of 56+/-12 years. there were 15 males and 5 females. The common comorbidities were hypertension and diabetes present respectively in 47.1% and 35.3% of cases. The diabetic nephropathy was the most frequent cause of end stage renal disease (ESRD). The mean time on dialysis therapy was of 83 months (8–288 months).

The most common symptom was fever (68.4%), followed by dry cough (57.9%) and dyspnea (42.1%). Three patients were asymptomatic. All COVID-19-infected patients had lymphopenia; lymphocyte level was less than 500/mm³ in 4 patients. Hyperleukocytosis was noted in only one patient. Mean hemoglobin level was 8.9+/-2g/dL. Thrombopenia was found in 4 patients. Eleven patients had elevated CRP; hepatic cytolysis has been noted in 6 patients. rhabdomyolysis has occurred in 2 cases.

At disease diagnosis, 7 of the 20 (35%) patients were managed on an out patient basis, whereas the remaining 13 (65%) required hospitalization because of hypoxia. Eight patients required intensive care unit (ICU) care. Choices regarding management strategy were made based on disease severity. 79% received double antibiotherapy and 60% curative anticoagulation. Dexamethasone was administered to 7 of 20 patients. All patients received vitaminotherapy. Ten patients required high oxygen flow CPAP – VNI, only one patient was intubated.

Six patients were discharged, and 7 patients died during hospitalization, all due to respiratory failure.

Conclusions: The current outbreak of SARS-CoV-2 represents a special risk for patients with chronic kidney disease. Its severity is highly variable in hemodialysis patients.

It is essential to have an adequate training of all professional in the hemodialysis unit on the prevention and identification measures of COVID-19.

No conflict of interest

POS-542

THE EPIDEMIOLOGY AND OUTCOME OF COVID-19 AMONG MAINTENANCE HEMODIALYSIS PATIENTS: A RETROSPECTIVE STUDY FROM A DIALYSIS NETWORK IN INDIA



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Introduction: COVID-19 is reported to have high morbidity and mortality in renal patients. In Indian hemodialysis patients, due to their high comorbidity burden and nature of care delivery in hospital based centres, the risk of transmission is high. The incidence of COVID varies based on health system practices, health seeking behaviour, reasons for testing, type of test used. The outcome is influenced by patient demographics, comorbidity, health system access, standard of care, cost of care and the type of payer system.