

# WORKING GROUPS & COMMITTEES





## NEWSLETTER

Newsletter N. 28 - May 2020

### COVID-19 and the ERA-EDTA Registry

COVID-19 has struck the nephrology community like it has hit many other areas of medicine and society in general. As patients on kidney replacement therapy (KRT) constitute a very vulnerable patient population with a high risk of death it was expected that both dialysis patients and the kidney transplant recipient population would be deeply affected by this pandemic. Therefore, in late March the ERA-EDTA Registry started to collect data on COVID-19 in two ways.

First, we asked national and regional renal registries to report to us aggregated data including the numbers of patients known to be affected by COVID-19 as well as the numbers of deaths in these groups. This information was placed on a dedicated section on our website and is updated regularly (https://era-edta-reg.org/index.jsp?p=covid19). As of May 24, 2020 a number of 26 registries had provided COVID-19 information. Their data indicate that - as expected - France, Italy and Spain are among the countries most affected whereas in Central and Eastern European populations the numbers of reported cases and deaths are substantially lower.

Second, we kindly requested all registries providing us with individual patient data to supply current data By Kitty Jager and Anneke Kramer





on COVID-19 cases and their survival. We are in the process of preparing a paper showing mortality and its risk factors for COVID-19 patients on dialysis and transplantation, including the data from at least 7 countries. This first paper will then be followed by another one, including all available information on COVID-19 as obtained from all collaborating registries - those contributing aggregated as well as individual patient data - drawing a picture of COVID-19 incidence and mortality in the KRT population, overall and by European country.

We would like to thank all renal registries for their hard work in data collection during these difficult times, for bringing in their national experiences and for contributing to these papers.





# The EDITH project: frequency of RRT and comprehensive conservative management in Europe

By Vianda Stel and Rianne de Jong

As part of the EDITH project, the ERA-EDTA Registry aimed to determine the number of dialysis and kidney transplant patients in Europe. The ERA-EDTA Registry receives data from national and regional renal registries. However, not all European countries have a renal registry, and this is why the ERA-EDTA Registry annual report cannot provide a complete overview of renal replacement therapy (RRT) in Europe. Therefore, in this EDITH project, the ERA-ED-TA Registry data were supplemented by data from other sources, such as Newsletter Transplant, insurance data and scientific papers. To this end, data on 10 extra countries (Armenia, Germany, Hungary, Ireland, Kosovo, Luxembourg, Malta, Moldova, Montenegro and Slovenia) are included. This means that, with the exception of some very small countries (like Andorra and Liechtenstein) all nations in Europe are represented. In addition, we aimed to estimate the frequency of comprehensive conservative care (CCM) for patients with end-stage kidney disease (ESKD) in individual European countries. CCM was defined according to the Kidney Disease Improving Global Outcomes (KDIGO) definition and consists of medical management of the complications of chronic kidney disease, nutritional and palliative care for patients with ESKD, without dialysis.

CCM has become an alternative for ESKD patients, in particular for those with a short expected survival on dialysis. In 2019, the ERA-EDTA Registry administered the



online EDITH Nephrologist survey and almost 600 European nephrologists from 33 European countries answered the two questions on the frequency of CCM. The help of all these nephrologists is much appreciated.

An added value of this study is that the proportional relationship of all therapeutic options for patients with ESKD in (almost) all European countries are estimated. Moreover, the substantial international differences in the frequency of RRT and CCM may inform countries about potential areas for improvement in access to the various treatment options for patients with ESKD.

For more details, please join the online presentation by Vianda Stel on Sunday 7 June 2020, 17:00 -18:30 hour (CEST) entitled "Differences in European renal replacement (EDITH): measurement brings knowledge".

### The EDITH Project

The European EDITH project, which is co-financed by the European Commission, focuses on the differing CKD treatment modalities along with organ donation and transplantation practices and their impact on health expenditures and patient outcomes. The EDITH consortium consists of 10 partners from all over Europe together with collaborating stakeholders including the European Kidney Health Alliance, renal registries, ERA-EDTA, the European Kidney Patients Federation, the French Agence de la Biomédecine and national kidney foundations.

See also www.edith-project.eu



# Renal function decline in older men and women with advanced CKD - Results from the EQUAL study

By Nicholas Chesnaye

The epidemiology of CKD differs by sex. Population-based studies consistently show a higher prevalence of CKD in women compared with men, yet approximately 60% of those starting renal replacement therapy for end-stage kidney disease are men. This paradox has partly been attributed to a faster decline of renal function in men 1. However, the current evidence on sexspecific slopes of renal decline in advanced CKD remains inconclusive, as others have demonstrated a more rapid progression in women in various populations 2-4, and some have found no difference between the sexes at all 5,6. Studying renal function decline by sex is complicated by sex-specific selection processes caused by a higher mortality risk in men across all ranges of pre-ESKD eGFR. Consequently, it is important when investigating this topic to take into account informative censoring, as the estimated slopes of renal function decline by sex may otherwise be biased.

Understanding the mechanisms under-lying the differences in renal function decline between the sexes is important if we wish to achieve individualized and sex-specific management in

advanced CKD. To shed more light on this subject, we investigated renal decline in men and women in the EQUAL study; an ongoing observational cohort study including stage 4-5 CKD patients not on dialysis receiving routine medical care in Germany, Italy, the Netherlands, Poland, Sweden, and the United Kingdom.

Patients of 65 years of age and older were included with an incident estimated glomerular filtration rate (eGFR) < 20 ml/min/1.73m<sup>2</sup>. Linear mixed models were used to model the eGFR trajectory by sex, and joint models were applied to deal with potential informative censoring.

In our population of older stage 4-5 CKD patients, we found a faster annual decline in renal function in men (16.2% per year, 95% Cl 15.9%-17.1%) compared with women (9.6% per year, 95% Cl 6.3%-12.1%), with a difference of 6.6% (95% Cl 4,3%-9,1%) [Figure]. These estimates remained largely unchanged after adjustment for important mediators, and despite men having a higher risk of censoring. Interestingly, women with diabetes had significantly faster declines in renal function compared with non-diabetics, whereas this was not the case in men. This highlights the disproportional negative impact of diabetes as a determinant of renal decline in women.

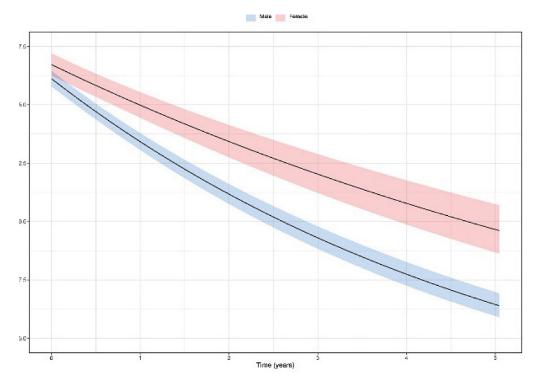


Figure: Renal decline in men and women over time



### **Registry Committee**

ERA-EDTA President Carmine Zoccali Reggio Calabria, Italy

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Patrice Ambühl Zurich, Switzerland

> Mustafa Arici Ankara, Turkey

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**Jizzo Bosdriesz, PhD**Epidemiologist

Rianne Boenink, MSc PhD student | Epidemiologist

**Arno Weerstra, MSc** Software Engineer

> Gita Guggenheim Secretary

Ronald Cornet, PhD IT advisor | Senior Medical Informatician

www.era-edta-reg.org

### ERA-EDTA Registry activities during the 57th ERA-EDTA Congress



### **ERA-EDTA Registry Symposium**

Sunday June 7, 08:00 - 09:30 CEST - Space 3-4

- Trends in cause specific (cardiovascular) death Gurbey Ocak
- Transplantation in childhood and re-transplantation in adulthood Evgenia Preka
- Comparison of transplant survival across Europe Rianne Boenink
- Prescribing patterns and polypharmacy in older people with advanced CKD Samantha Hayward

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### Combatting kidney disease in Europe: role of European Kidney Health Alliance (EKHA)

Sunday June 7, 17:00 - 18:30 CEST - Gold Plenary

 Differences in European renal replacement (EDITH): measurement brings knowledge
Vianda Stel

### **FC 30**

### **CKD Epidemiology** \_

Monday June 8, 17:00 - 18:30 CEST - Brown 3

 Renal function decline in older men and women with advanced CKD results from the EQUAL study Nicholas Chesnaye

#### **FC 31**

#### Paediatric Nephrology \_

Monday June 8, 17:00 - 18:30 CEST - Blue 1-2

- Longitudinal changes and outcome of high blood pressure in European children on renal replacement therapy Enrico Vidal