





Réseau Epidémiologie et Information en Néphrologie



**Partnership for International Kesearch and Education** A Global Living Laboratory for Cyberinfrastructure Application Enablement HIV and CKD Stage 5: Outcomes and Clinical Characteristics among Patients in

# **France and the United States**

**National Science** Foundation

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# I. Research Overview and Outcome

#### >:Background

- •Nearly 1% of all patients with stage-5 chronic kidney disease(CKD-stage-5)
- in the US and Europe are estimated to be infected
- with human immunodeficiency virus(HIV).
- Their dual pathology represents a growing therapeutic challenge.



This study aimed to determine the point prevalence, and clinical characteristics of HIV-infected patients in the French Renal Epidemiology Information Network (REIN) registry.

#### >Methods:

Cross-sectional analysis of all HIV-infected registry patients undergoing renal replacement therapy

(RRT (i.e. hemodialysis [HD], peritoneal-dialysis[PD], or renal transplantation), as of December, 31, 2007.

Variables analyzed included co-morbidities, age, gender, body mass index(BMI),

country of origin, and time on RRT.

Chi-square testing; and t-tests were used as appropriate with SAS (version 9.2).

•Three prevalence rates were calculated for HIV-infected, RRT patients, using as denominators:

1)French population;

2)French HIV-infected adult population;

3)French, RRT population.

#### **Results:**

✓ Of the 381,HIV-infected RRT patients from the REIN, there were 238 males, and 143 females; with 317 on HD, 7 on PD, and 57 with functioning renal grafts.  $\checkmark$  The median age and time on RRT was 50.0 and 6.0 years, respectively.  $\checkmark$  The prevalence of HIV-infection and RRT was 0.068 per 1000 French population, 2.7 per 1000 HIV-infected adults in France, and 12.0 per 1000 French, CKD-Stage-5 patients.

 $\checkmark$  No differences existed in gender, age, BMI, hepatitis-B-co-infection, RRT time, or diabetes, between the three RRT modalities .

 $\checkmark$  However, no transplant patients had hepatitis-C (HCV), compared with 15.8% in the HD, and 14.3% in the PD groups(p<0.01). ✓ No HIV-infected transplant patients had chronic heart disease (CHD) declared in the REIN, compared to HD (21.5%) patients (p<0.0001).

HCV Infection among Transplant, Hemodialysis and Peritoneal Dialysis Patients in the REIN Registry as of Dec, 31, 2007



✓ Most dialysis patients were of African descent (59.8%),

whereas transplant patients were mainly of European descent (75.0%).

## **II. International Experience**



During my time in Paris, I worked at the Agence de la biomédecine, which is the national health agency in charge of allocation of all graft/organ transplants to patients in the entire country of France.

♦I stayed in Paris for a total of 8 weeks, during which i lived in the 7th arrondissement (Paris is divided into 20) arrondisements), a very central portion of the city close to the Eiffel tower, where most of the international embassies are located.

❖I was fortunate to be able to stay with the niece (Fanny), of my remote advisor, Dr. Couchoud in an apartment in this area. She was very sweet and helped me practice my French (since French was my minor in college but I had not spoken it in quite a while!).

I worked in the northern portion of Paris, La Stade de France, where the Agence was located, so I took the Paris metro daily for transport to and from work.



View on walk to metro from my apartment in mornings

During my time in France, I had the opportunity to make several new friends and acquaintences through my work and other social events that I attended, including a Persian cultural arts organization.

In Italy's Tuscany coast



□ I was also able to take a trip to Italy's Tuscany coast, and to Turin, Italy on two of my weekends there to visit my good friend who lives there. I also explored the other parts and attractions of Paris during my free time on the weekends.

□In summary, my time spent working at the REIN and in Paris was a very educational and beneficial opportunity, during which I learned a great deal about another country's national health registry, and also experienced an amazing culture and language in a wonderful city.





### III. Acknowledgement

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