

# HIV and CKD Stage 5: Outcomes and Clinical Characteristics among Patients in France and the United States

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## I. Background and Significance

>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), with their dual pathology representing a growing therapeutic challenge

>The aim of this study was to determine the point prevalence and clinical characteristics of HIV-infected patients in the French Renal Epidemiology Information Network (REIN) registry

#### II. 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

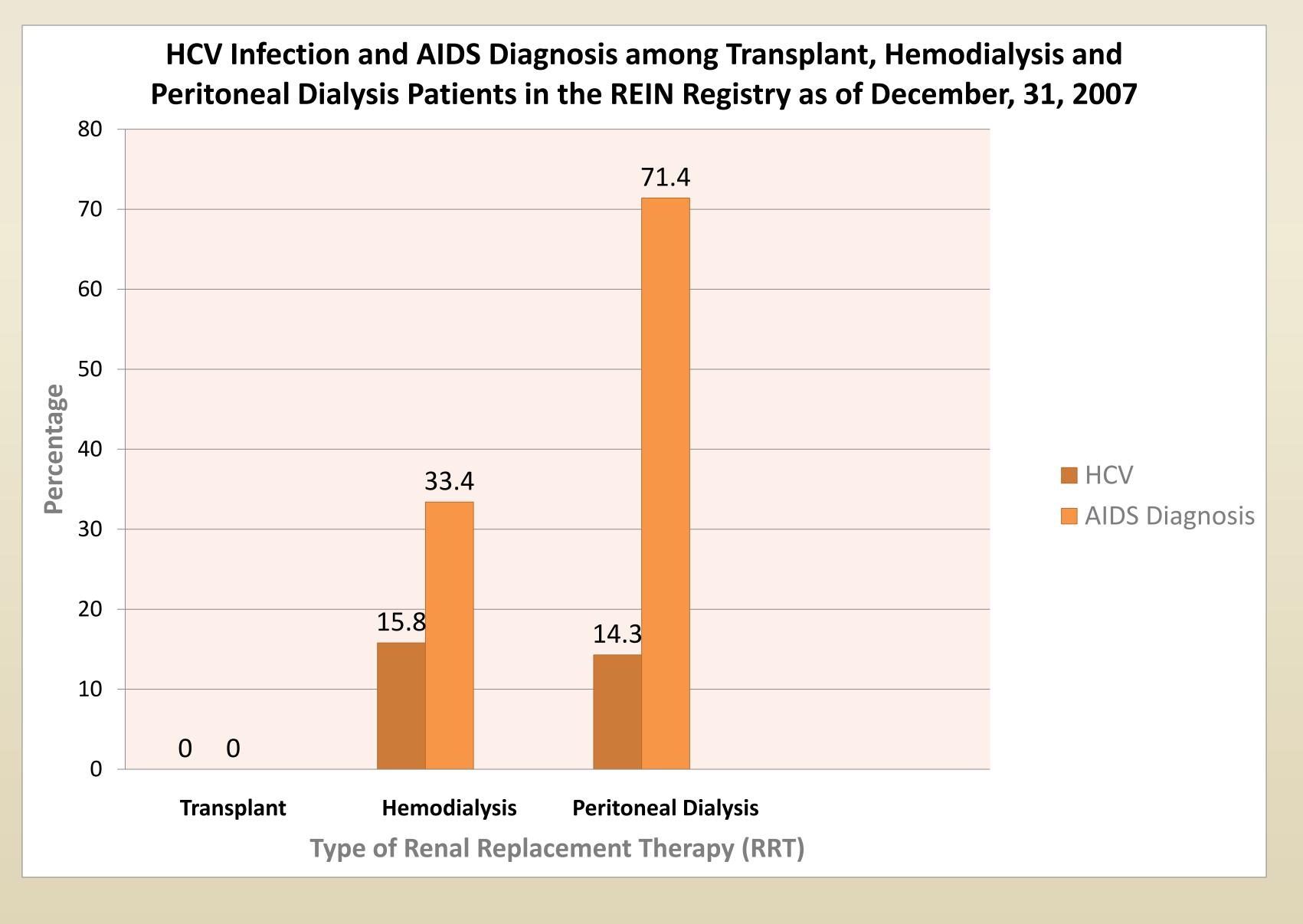
**➢ Chi-square testing**; and t-tests were used as appropriate with SAS (version 9.2)

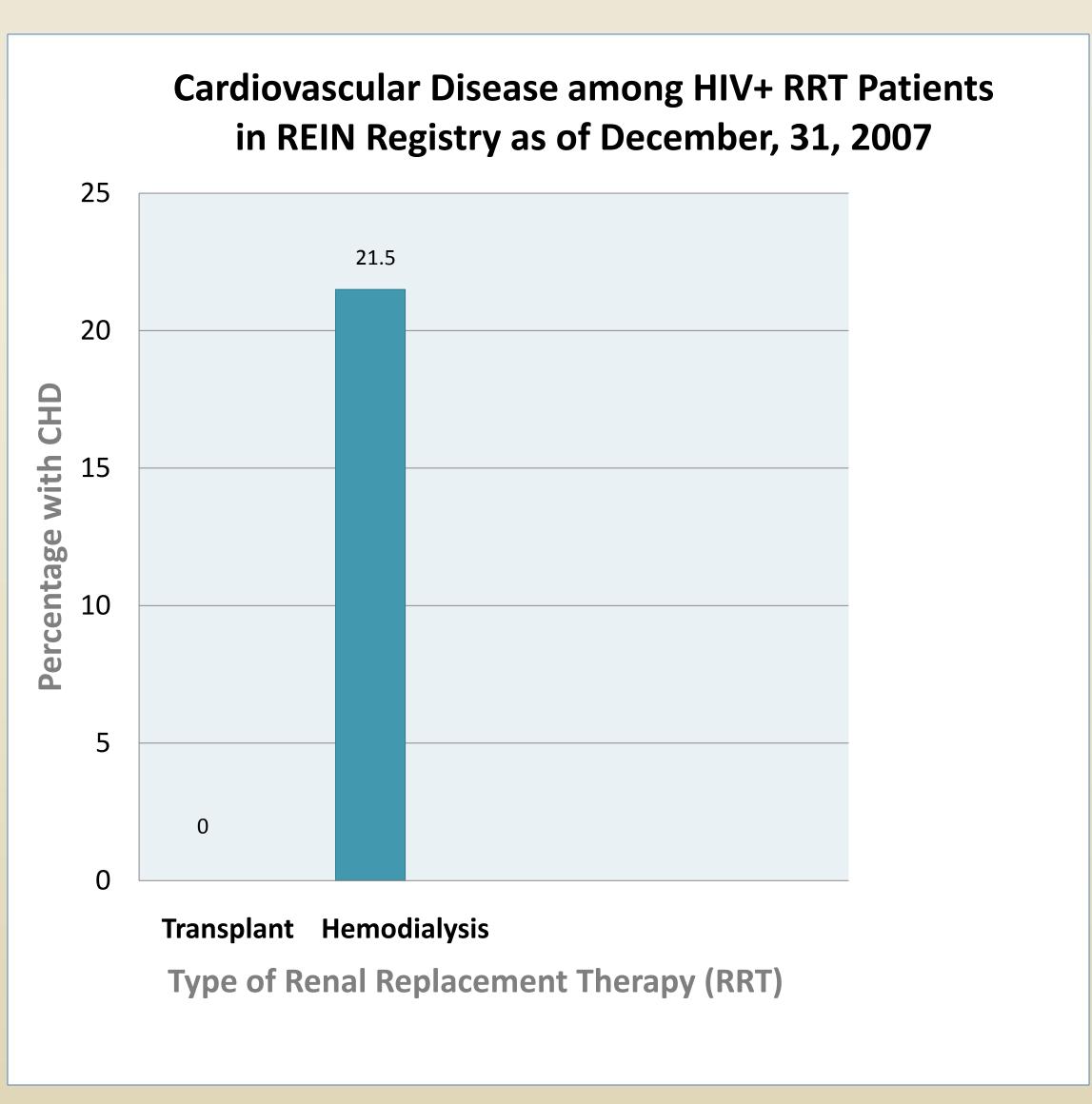
Three prevalence rates were calculated for HIV-infected, RRT patients, using as denominators:

- 1)French population;
- 2)French HIV-infected adult population;
- 3)French,RRT population.

#### **III. Results**

- ✓ Of the 381 HIV-infected RRT patients from the REIN, there were 238 males, and 143 females
- √ There were a total of 317 on HD, 7 on PD, and 57 with functioning renal grafts
- √ The median age was 50.0 and median time on RRT was 6.0 years
- ✓ The prevalence of HIV-infection and RRT was:
  - 1) French Population: 0.068 per 1,000 French population,
  - 2) French HIV-infected adult population: 2.7 per 1,000 HIV-infected adults in France, and
  - 3) French RRT population: 12.0 per 1,000 French, CKD-Stage-5 patients
- ✓ No differences existed in gender, age, BMI, hepatitis-B-co-infection, RRT time, or diabetes, between the three RRT modalities
- ✓ However, findings showed that no transplant patients had hepatitis-C (HCV), compared with 15.8% in the HD, and 14.3% in the PD groups(p<0.01)
- ✓ Moreover, no HIV-infected transplant patients had chronic heart disease (CHD) declared in the REIN, compared to HD (21.5%) patients (p<0.0001)
- ✓In terms of racial differences, most dialysis patients were of African descent (59.8%), whereas transplant patients were mainly of European descent (75.0%)





### **IV. Conclusions**

- ✓ Findings suggest that HIV-infected transplant patients have less HCV and CHD than their PD & HD counterparts
- ✓ Our results are consistent with the current literature showing an HIV prevalence of nearly 1%, among RRT patients
- √ The limitations of this study include the relatively small number of patients in addition to some missing co-morbidity data

# V. Acknowledgements

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