International Variation in Dialysis Discontinuation: Results from the Dialysis Outcomes and Practice Patterns Study (DOPPS)

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Background / Goal

Figure 1: Adjusted HR (95% CI) of DDT for each country (relative to US)

Method: Prospective cohort study of DDT in 12 DOPPS countries, 1996-2015

Sample: Out of 24104 patients who received hemodialysis in participating DOPPS facilities during study phases 1-5 (1996 to 2015), 46370 died during study follow up, and 5412 patients left DOPPS facility due to discontinuation of dialysis therapy, where the reason for departure was identified by staff: DDT v. death, transfer, transplantation, or other.

Limitations: Phase 1 time on dialysis information only available for subset of patients randomly selected into full study; phase 4 and 5 US large dialysis organization facilities were excluded due to DDT information unavailability

Analysis: Cox model to estimate hazard ratios (HRs), adjusting for covariates

Outcome: Dialysis discontinuation; non-DDT death events were censored

Main Predictors: Age, time on dialysis, country, diabetes status, DOPPS phase

Adjustment covariates: Country, phase, age, time on dialysis, sex, diabetes

Results

• Adjusted DDT hazards varied greatly, with
  30-fold variation across countries (figure 1) and
  15-fold variation across age groups (figure 2)

• DDT rates were highest among those with diabetes: HR = 1.15 (95% CI = 1.08,1.22)

Results

• The wide variation of DDT amongst 12 countries suggests sociocultural determinants may be important contributors to DDT, and how DDT is designated and accepted.

• Enhancing our understanding of DDT, particularly during the first few months of dialysis therapy, may help align practices when considering dialysis initiation and help us better understand the need for conservative management and palliative renal care services.

Summary / Conclusions

• The wide variation of DDT amongst 12 countries suggests sociocultural determinants may be important contributors to DDT, and how DDT is designated and accepted.

• The strong association of DDT with age and time on dialysis may imply different considerations and practices with respect to DDT for different patient populations.

• Enhancing our understanding of DDT, particularly during the first few months of dialysis therapy, may help align practices when considering dialysis initiation and help us better understand the need for conservative management and palliative renal care services.

References:

Gessert 2013, PMID 23635315; Lambi 2006, PMID 16820372; Thomas 2013, PMID 23580783