Functional status among patients receiving peritoneal dialysis: Results from the PDOPPS

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Background / Goals

- **Background**
  - We have shown that high functional dependence among hemodialysis (HD) patients varies across DOPPS countries and is associated with mortality. However, little is known about functional status in peritoneal dialysis (PD) patients, its variation by country, determinants, or clinical outcomes.

- **Goals**
  - To examine functional status variation across 7 PDOPPS countries
  - To compare functional status for PD vs. HD patients
  - To estimate the hypothesized effects of functional status on all-cause mortality and permanent transition to HD in PD patients

Methods

- **Sample**: 2563 PD and 3868 HD patients that have completed patient questionnaires on functional status (instrumental and basic activities of daily living, using the Katz and Lawton-Brody questionnaires)

- **Analysis**
  - Functional status compared across PDOPPS countries, and between PD/HD
  - o Model: Marginal logistic GEE model to estimate odds ratios (OR & 95% CI)
  - o Outcome: functional status score < 11
  - o Exposure: country, PD/HD
  - o Covariates: demographics, comorbidities, labs, and PD characteristics for PDOPPS country comparison
  - Association between functional status and A) all-cause mortality, B) permanent transition to HD, or C) The composite outcome of mortality or permanent transition to HD, for PD patients
  - o Model: Cox model to estimate hazard ratios (HR & 95% CI)
  - o Exposure: functional status summary score categorized as >8 (functionally independent), 8-11, 11-13, or 13 (independent)
  - Covariates: demographics, comorbidities, labs, and PD characteristics

Summary / Conclusions

- Among PD patients, the prevalence of a FS score <11 was highest in Thailand and lowest in Japan but varied relatively little across the other 4 countries (Figures 1-2).

- Adjusting for multiple confounders, functional status was strongly inversely and monotonically associated with mortality but not with the risk of technique failure (Table 1).

- Conclusions: Functional status appears to be a strong predictor of mortality that cannot be fully explained by its associations with the many covariates used in these analyses. We found little association between functional status and technique failure, which may be explained by the availability of nurse or caregiver assistance for peritoneal dialysis. Future evaluations of patient outcomes for assisted versus unassisted PD across the DOPPPS is an important undertaking.