

GLOSSARY**K/DOQI GUIDELINES**

The National Kidney Foundation's Kidney Disease Outcomes Quality Initiative clinical practice guidelines for chronic kidney disease

Kt/V

A measure of dialysis adequacy, where K = dialyzer clearance, t = time, and V = volume of body water

MEDICAL OUTCOMES STUDY 36-ITEM SHORT-FORM HEALTH SURVEY (SF-36®)

Assesses eight aspects of physical and mental health on a scale of 0 (worst) to 100 (best)

BECK DEPRESSION INVENTORY® (BDI®)

Standard questionnaire used by psychiatrists to assess depression

or ESRF. Poorest long-term renal survival (8% after 10 years) was seen in the group of nephrotic patients with ≥ 1 cellular crescent.

The authors conclude that initial severity of MPGN, rather than MPGN subtype, is predictive of risks of ESRF and post-transplantation disease recurrence. The poorer outcomes often seen in type II MPGN can be attributed to the fact that these patients generally have more-severe disease at diagnosis than those with other subtypes of MPGN.

Rebecca Ireland

Original article Little MA *et al.* (2006) Severity of primary MPGN, rather than MPGN type, determines renal survival and post-transplantation recurrence risk. *Kidney Int* 69: 504–511

Recommendations for dialysis doses for adults should also be followed for adolescents

According to the K/DOQI GUIDELINES, adult hemodialysis patients should be given a minimum dialysis dose (as single-pooled kt/V [$spKt/V$]) ≥ 1.2 . Gorman *et al.* have demonstrated, in a large, retrospective cohort study, that this minimum dose is also appropriate for children aged 12–18 years.

The characteristics of 613 patients aged 12–18 years from the 2000/2001 End-Stage Renal Disease Clinical Performance Measures Project were linked to data from the US Renal Data System from 1999–2001. There were 14 deaths during 695 patient-years of follow-up, and 185 hospitalizations totaling 1,108 days during 477 patient-years of follow-up. The mean $spKt/V$ was 1.48 ± 0.36 . Following adjustment for confounders, patients who received a dose < 1.2 experienced a significantly greater number of hospitalizations and days hospitalized than patients who received ≥ 1.2 ($P = 0.06$ and $P < 0.05$, respectively). The unadjusted mortality rate was also higher in the lower-dose group, although the difference was not statistically significant—4.4 deaths/100 patient-years vs 1.5 deaths/100 patient-years. Further improvement was observed at doses of 1.2–1.4, but not at doses > 1.4 . The authors therefore recommend 1.2–1.4 $spKt/V$ as the optimum dialysis dose.

This study helps to address the dearth of guidance regarding dialysis in adolescents. Further studies, however, are needed over

a longer follow-up period, and in children aged < 12 years.

Pippa Murdie

Original article Gorman G *et al.* (2006) Clinical outcomes and dialysis adequacy in adolescent hemodialysis patients. *Am J Kidney Dis* 47: 285–293

Art can improve quality of life for long-term hemodialysis patients

Impaired quality of life and depression—common findings in patients on maintenance hemodialysis—can be ameliorated with participation in activities such as drawing, painting, crafts, writing and music. This is the finding of an observational study of an Arts-In-Medicine Program led by artists and volunteers at the University of Florida and Shands Outpatient Dialysis Unit.

For the 46 long-term hemodialysis patients who participated in the art projects during dialysis sessions, quality of life was assessed using the SF-36® (Medical Outcomes Trust, Inc., Waltham, MA) and the BDI® (The Psychological Corporation, San Antonio, TX). After 6 months, limitations due to physical health problems were fewer ($P = 0.04$), mean weight gain was reduced ($P = 0.02$), mean serum carbon dioxide and phosphate levels were slightly greater ($P < 0.01$ and $P = 0.04$, respectively) and there was a trend towards less depression than at baseline. Patients with high levels of participation in the program had significantly better mean scores after 6 months for social function ($P = 0.01$) and bodily pain ($P = 0.04$) than those who participated less. Subjectively, the Arts-In-Medicine Program had an overall positive impact on quality of life, with many participants commenting that they felt more content during dialysis treatments following participation in the program. The activities did not disrupt nursing protocols or cause logistical problems in the dialysis unit.

The entire Arts-In-Medicine Program costs between US\$350 and \$650 per month, thereby making it an inexpensive approach to improving quality of life in long-term hemodialysis patients. The program might be preferable to conventional strategies for improving quality of life, such as pharmacological therapy for depression.

Rachael Williams

Original article Ross EA *et al.* (2006) Observational study of an Arts-In-Medicine Program in an outpatient hemodialysis unit. *Am J Kidney Dis* 47: 462–468