A pre-dialysis psychoeducational intervention increased length of survival more than usual care in patients with chronic kidney disease

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**Notes**
A pre-dialysis psychoeducational intervention increased length of survival more than usual care in patients with chronic kidney disease


Q In patients with chronic kidney disease, does a pre-dialysis psychoeducational intervention increase length of survival?

METHODS

**Design:** randomised controlled trial.

**Allocation:** unclear allocation concealment.

**Blinding:** blinded (attending nephrologists).

**Follow up period:** 20 years (mean 8.5 y).

**Setting:** 8 hospitals in Montreal, Quebec and Calgary, Alberta, Canada.

**Patients:** 400 patients with chronic kidney disease and progressive reduction in kidney function (ie, serum creatinine concentrations of 3.96 mg/dl [350 μmol/l] and increasing), including those with immediate requirement for initiation of renal replacement therapy.

**Intervention:** 172 patients were allocated to a pre-dialysis psychoeducational intervention, which comprised a single, 60–75 minute “one on one” slide and lecture presentation by a trained health educator. Topics addressed included normal kidney function, kidney diseases, dietary management, and renal replacement therapy (ie, maintenance haemodialysis, peritoneal dialysis, and renal transplantation), and patients received a 22 page booklet summarising the information. 163 patients were allocated to usual care, which varied within and among hospitals but generally comprised relevant information from the attending physician or special referral to a nurse clinician.

**Outcomes:** duration of survival (from the time of pre-dialysis psychoeducational intervention and from the time maintenance dialysis was initiated).

**Patient follow up:** 335 patients (84%) were included in the intention to treat analysis (mean age 51 y, 64% men). (mean 9.36 v 7.96 y, hazard ratio 1.32, 95% CI 1.00 to 1.74) and the time of initiation of dialysis (6.52 v 5.67 y, hazard ratio 1.35, CI 1.02 to 1.78) (analyses adjusted for age, general non-renal health at baseline, and time from identification to intervention or usual care).

CONCLUSION

Patients with chronic kidney disease who received a pre-dialysis psychoeducational intervention survived longer than those who received usual care.

**Commentary**

Patients in the study by Devins et al were recruited 20 years ago, and standard care of pre-dialysis patients has changed appreciably. Today, many patients who are diagnosed with early signs of renal deterioration are enrolled in organised pre-dialysis programmes. Typically, such programmes include regular follow up and monitoring of disease progression and psychoeducational interventions directed toward facilitating self management of prescribed therapeutic regimens (eg, diet and medications) and coping. Programme goals include arresting or slowing disease progression and improving prognosis. It is important to establish the long term efficacy of pre-dialysis programmes. The study by Devins et al offers support for the psychoeducational component of pre-dialysis programmes. Strengths of the study include the randomised design, lengthy follow up period (mean 8.5 y), and measurement of an objective patient outcome: duration of survival. The psychoeducational intervention was done at a time when usual care was not as organised and integrated as it is today, so that if the same study was conducted today, there would likely be smaller or even no differences between groups.

Further research is needed to identify the mechanisms underlying the beneficial effects of the intervention and to direct refinement of pre-dialysis programmes to meet the individualised needs of patients. A growing body of literature supports the importance of personality traits, such as conscientiousness, in improving patient survival in chronic renal insufficiency, as such traits may mediate individuals’ abilities to look after themselves and adhere to prescribed treatment regimens. 1 2 Pre-dialysis programmes should also address the psychoeducational needs of family members who often assist patients with their care. 3

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MAIN RESULTS

246 patients died. Patients who received the pre-dialysis psychoeducational intervention had a longer duration of survival than patients who received usual care from both the time of pre-dialysis education.

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