

# Exercise programme to improve quality of life for patients with end-stage kidney disease receiving haemodialysis: the PEDAL RCT

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## Plain English summary

### The PEDAL RCT

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## Plain English summary

**A**lthough the benefits of exercise in the general population are well recognised, we do not know if offering cycling exercise during haemodialysis is an effective way to improve quality of life, and if this would be a cost-effective way to provide exercise training for this patient population. To determine whether or not this type of exercise training is effective, and provides value for money, this study compared cycling during haemodialysis treatment, three times per week for 6 months, with usual care that does not include routine delivery of any exercise training. Five regions of the UK were included in the study. We compared the results from the two groups at the start of the study and at 6 months, after correcting for age and diabetes status. We also assessed the economic impact of delivering the cycling during haemodialysis programme and interviewed people from different regions of the UK in both groups.

The baseline assessments revealed a deconditioned population in the study. There was no difference in quality of life or any physical function measures between the group that performed cycling during haemodialysis and the usual-care group. Compliance with the exercise intervention was very poor. Interviews with patients showed that patient engagement with the exercise training was linked to the presence of an exercise culture, and leadership to provide this, in the renal unit. An economic evaluation showed that delivering cycling during haemodialysis would not be value for money when delivered to a deconditioned haemodialysis population. Ways to engage patients with exercise training during their haemodialysis treatment should be explored further.



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