Reviewer's report

Title: The effect of gender, age, and geographical location on the incidence and prevalence of renal replacement therapy in Wales

Version: 1 Date: 16 June 2006
Reviewer: Cécile Couchoud

Reviewer's report:

General
1) I don't understand the purpose of this study since UK has an ESRD registry that can gives the same information. Why undertake a specific census?

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
2) For my opinion, it is a methodological error to give incidence rates results with a cross sectional study. The results are biased: in one year, many new patients will have die before the time of the survey.
3) The authors should better explain why they choose to a moving average method to present their results. Standardization does not exclude the possibility to present data for a range of age bands.
4) In their figure 7 it is not clear if the prevalence rates are standardized. If not, it is difficult to make comparisons between LHB areas.
5) We do not agree with the conclusion of the authors that the lower prevalence rates for very old age is only linked to inequality. Many factors influencing kidney disease incidence and progression are also risk factors for cardiovascular disease. Maybe the 442 "missing" patients are those who have died before the onset of dialysis.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
4) The total of number of patients in table 1 is 2586 while in the text it is always said that 2585 patients were included.

What next?: Reject because scientifically unsound

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes

Declaration of competing interests:
'I declare that I have no competing interests'