Author's response to reviews

Title: Psychiatric disorder in early adulthood and risk of premature mortality in the 1946 British Birth Cohort

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Author's response to reviews: see over
Dear Dr Kelly

Many thanks for your letter. We are grateful for the trouble the reviewers have gone to in assessing our papers.

We note the favourable comments of Reviewer 1. We have included a note at the bottom of each table reminding the reader of the meaning of the 3 categories of the Index of Definition.

Reviewer 2 has asked for a comment on the fact that incidence rates of physical disease do not explain mortality rates from these diseases in populations with psychiatric disorder. This is a major interest of ours and we are happy to do this. We have added some relevant text on pages 10 and 11 in the discussion section.

Reviewer 2 also raises the issue of cancer deaths versus cardiovascular mortality in the study. He rightly notes that (from another paper on the cohort) the deaths from cancer exceed those of cardiovascular disease, and is concerned that this is untypical of mortality patterns in mid life. However, we can only reassure him that the pattern observed in the 1946 birth cohort is typical of the UK mortality statistics. Our publication (A review of lifetime risk factors for mortality Kuh et al British Actuarial Journal 15, supplement, 17-64 (2009) shows in figs 3 and 4 that before age 60 (i.e. the ages that concern this cohort), cancer mortality outstrips cardiovascular mortality, and in women this difference is particularly strong. In other words, the 1946 cohort is not untypical of the wider population trends. We have added a comment and this reference in the discussion section on page 9. Publications based on older data, data from other countries with different mortality patterns, and older cohorts (where cardiovascular mortality overtakes cancer) will find somewhat different patterns, and this is presumably why the papers cited by the reviewer do not accord with our sample.

We did not enter into a discussion of cause specific mortality because the number of deaths from 36-60 was small and we did not have statistical power to do so. We would therefore prefer not to explore this issue in the paper as we will end up diverting attention from the main thrust of the paper and risk confusing readers. For the same reasons, whilst we are aware of Kilbourne’s paper in General Hospital Psychiatry, the fact that it focuses exclusively on deaths from heart disease, and describes a cohort where 40% of participants were over 65 at the start of the study, we feel specific discussion of its findings would be unhelpful.

We hope that the editors will agree that the changes we have made to the article address the reviewers’ comments satisfactorily.

Yours sincerely