

Correspondence

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How to interpret different results for CRHTT data

Jacobs & Barrenho¹ used the same data as Glover *et al*² when they were comparing admissions in primary care trusts with and without crisis resolution and home treatment teams (CRHTTs). However, they employed different methods for their analysis and reached conflicting conclusions. According to Jacobs & Barrenho, the introduction of CRHTTs did not have a statistically significant influence on the number of admissions, while Glover *et al* found a significant reduction especially for CRHTTs which offered a 24-hour service.

In their article, Jacobs & Barrenho¹ do report a reduction in admissions (e.g. Fig. 4) but state that it was not statistically significant. They do not mention power calculations. There were usable data available from 229 primary care trusts (PCTs) and the authors conducted various complex analyses by using a number of control factors and by studying trends over time. It could be that their lack of statistically significant findings is because of a lack of power. If this is the case, there is no fundamental difference between their findings and the previous analysis.²

At the end of their article, the authors make the suggestion that perhaps data should be analysed at the level of CRHTTs and not at the level of PCTs, given that there is huge variation between CRHTTs. We concur with that suggestion and we would like to go even further and suggest that future studies look at the service actually provided to individual patients in terms of how many visits are undertaken over a specified number of days. This information is readily available from most electronic notes systems. Further study is needed to investigate the types of interventions provided, such as whether medication was prescribed and administered, whether specific psychological treatments were offered, and so on. The availability of such data will allow an informed decision to be made about what is required to avoid admission to hospital and whether a CRHTT is the best organisational format to deliver that care.

1 Jacobs R, Barrenho E. Impact of crisis resolution and home treatment teams on psychiatric admissions in England. *Br J Psychiatry* 2011; **199**: 71–6.

2 Glover G, Arts G, Babu KS. Crisis resolution/home treatment teams and psychiatric admission rates in England. *Br J Psychiatry* 2006; **189**: 441–5.

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Authors' reply: Power calculations are seldom used in the multiple regression context, particularly with panel data and population-level data. These tend to be rather made with trial-based data to estimate appropriate sample sizes. Many would argue that *post hoc* power calculations are misleading and irrelevant.^{1–3} Nevertheless, a *post hoc* power calculation based on the ordinary least squares model which uses the total number of valid cases used in the analysis, the total number of predictors in the model, the model *R*-squared, and the assumed *P*-value (set at 0.05), suggests that for all models the power is 1.00. By convention, this value should be greater than or equal to 0.80.

More importantly though, the benefit of the difference-in-difference methodology is that it provides for more precise estimates than the previous analysis and also allows for the simultaneous inclusion of covariates such as the team fidelity criteria (e.g. crisis resolution and home treatment teams (CRHTTs) offering a 24-hour service) as well as overall time trends. There are fundamental differences between the two types of analyses with the difference-in-difference methodology being a far more potent and robust policy evaluation tool.

We agree that future studies should ideally look at analysing admissions (and potentially other factors) at CRHTT level. We explored the possibility of doing this by contacting several teams to ask about their geographical boundaries, but found, surprisingly, that many teams were in fact unable to clearly delineate their geographical 'patch' and that even if they could define their current boundaries, these had often changed over time, making an analysis of long-term trends with difference-in-difference methodology unfeasible. Moreover, a large-scale national longitudinal study would require data from before the policy change (circa 1998) to effectively assess the policy impact, for which routine administrative data is more suited than data from individual electronic records systems, which have huge variation in detail, quality and method of collection.

- 1 Levine M, Ensom MH. Post hoc power analysis: an idea whose time has passed? *Pharmacotherapy* 2001; **21**: 405–9.
- 2 Hoening JM, Heisey DM. The abuse of power: the pervasive fallacy of power calculations for data analysis. *Am Stat* 2001; **55**: 19–24.
- 3 Fogel J. Post hoc power analysis: another view. *Pharmacotherapy* 2001; **21**: 1150.

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Need to identify modifiable risk factors of dementia in the older UK African–Caribbean population

The article by Adelman and colleagues¹ made an important contribution in exploring dementia in older people of African–Caribbean origin in the UK. This article paves a way for policy makers in assessing the public health implications of this ubiquitous condition in terms of care burden and economic impact. However, this research study raises important issues.

Previous studies² consistently indicate increased prevalence of dementia in older African–Caribbean people when compared with the indigenous White population in the UK. The magnitude of this difference between these populations is not clear. Hence, there is a definite need for well-planned epidemiological studies to determine the actual burden of disease. Surprisingly, Adelman *et al*'s study¹ presumed that vascular factors such as hypertension and type 2 diabetes are likely to increase the burden of dementia in the African–Caribbean population. However, the possibility of other risk factors such as depression, illiteracy and prevalence of apolipoprotein 4, which, presumably, increase the chances of subsequent dementia, needs more emphasis.^{3,4} Current data from sub-Saharan Africa and India⁴ suggest that age-adjusted dementia prevalence estimates in 65-year-olds are low (1–3%) compared with other low- and middle-income countries. It appears that there is a need to identify potentially modifiable environmental/genetic factors to explain the increased prevalence of dementia when this population migrated to the UK. Therefore, future studies are needed to identify these risk factors in this migrant population.

- 1 Adelman S, Blanchard M, Rait G, Leavey G, Livingston G. Prevalence of dementia in African–Caribbean compared with UK-born White older people: two-stage cross-sectional study. *Br J Psychiatry* 2011; Jun 8: doi: 10.1192/bjp.bp.110.086405. Epub ahead of print.
- 2 Adelman S, Blanchard M, Livingston G. A systematic review of the prevalence and covariates of dementia or relative cognitive impairment in the older African–Caribbean population in Britain. *Int J Geriatr Psychiatry* 2009; **24**: 657–65.
- 3 Stewart R, Russ C, Richards M, Brayne C, Lovestone S, Mann A. Depression, APOE genotype and subjective memory impairment: a cross-sectional study in an African–Caribbean population. *Psychol Med* 2001; **31**: 431–40.
- 4 Kalaria RN, Maestre GE, Arizaga R, Friedland RP, Galasko D, Hall K, et al. Alzheimer's disease and vascular dementia in developing countries: prevalence, management, and risk factors. *Lancet Neurol* 2008; **7**: 812–26.

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Authors' reply: We agree that it is helpful to emphasise that we do not know whether vascular factors are the primary aetiology behind the increased prevalence of dementia in this population. We considered literacy to be a risk, and this (like our earlier study) controlled for education¹ and found no difference between ethnic groups. Similarly, depression rates in older Black and minority ethnic populations have not been found to be raised;¹ nor has the prevalence of apolipoprotein 4 when compared with their White counterparts.

However, there are contradictory findings about whether the expression may be the same.^{2–5} Thus, although all these factors may relate to the rates of Alzheimer's dementia, there was no clear evidence to suggest they are responsible for the increased rate in the African–Caribbean group. Finally, there is no evidence that the prevalence of dementia in the participant's country of birth (Caribbean Islands) is lower than that for the UK. A Delphi consensus study estimated that the rates for Latin America and the Caribbean are at least as high as for Western Europe.⁶ We agree, however, that more research is needed to consider the possible aetiology and modifiable risk factors.

Declaration of interest

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- 1 Livingston G, Leavey G, Kitchen G, Manela M, Sembhi S, Katona C. Mental health of migrant elders – the Islington study. *Br J Psychiatry* 2001; **179**: 361–6.
- 2 Stewart R, Russ C, Richards M, Brayne C, Lovestone S, Mann A. Depression, APOE genotype and subjective memory impairment: a cross-sectional study in an African–Caribbean population. *Psychol Med* 2001; **31**: 431–40.
- 3 Farrer LA, Cupples LA, Haines JL, Hyman B, Kukull WA, Mayeux R, et al. Effects of age, sex and ethnicity on the association between apolipoprotein E genotype and Alzheimer disease. A meta-analysis. *JAMA* 1997; **278**: 1349–56.
- 4 Tang MX, Stern Y, Marder K, Bell K, Gurland B, Lantigua R, et al. The APOE-epsilon4 allele and the risk of Alzheimer disease among African Americans, whites, and Hispanics. *JAMA* 1998; **279**: 751–5.
- 5 Murrell JR, Price B, Lane KA, Baiyewu O, Gureje O, Ogunniyi A, et al. Association of apolipoproteinE genotype and Alzheimer disease in African Americans. *Arch Neurol* 2006; **63**: 431–4.
- 6 Ferri CP, Prince M, Brayne C, Brodaty H, Fratiglioni, L, Ganguli M, et al. (2005) Global prevalence of dementia: a Delphi Consensus Study. *Lancet* 2005; **366**: 2112–7.

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Internet-based CBT for severe health anxiety

Having appraised the evidence regarding the article by Hedman *et al*,¹ we write to comment as follows.

First, it is not possible, from the article,¹ to tell whether the comparison group was similar to the experimental group, as no statistical tests were done.

Second, the treatment described by the authors as internet-based cognitive–behavioural therapy (CBT) involved components of mindfulness and may have been more appropriately described as internet-based modified CBT.

Third, given that defined psychological approaches, including CBT are accepted as treatment for health anxiety,^{2–5} CBT delivered as usual may have been a more appropriate control treatment than the online discussion forum. An online discussion forum is not recognisable or recommended treatment for health anxiety.

Fourth, the description of participant recruitment is contradictory: 'There were no advertisements in newspapers or in other media. However, an article about the study was published in a major nationwide newspaper'.

Fifth, we note that the power in per cent is not stated explicitly in the study such as to inform respective clinician's appraisal of this study as regards applicability of results to various clinical settings.

In light of the above, there is a need for cautious interpretation of the evidence presented, which we feel has limited therapeutic value in the acute psychiatry settings, such as crisis resolution and home treatment teams and in-patient wards, in which we work. However, we value this paper as adding to the limited body of knowledge available about treatments for health anxiety and expanding the notion that this disorder is treatable.

- 1 Hedman E, Andersson G, Andersson E, Ljótsson B, Rück C, Asmundson GJG, et al. Internet-based cognitive–behavioural therapy for severe health anxiety: randomised controlled trial. *Br J Psychiatry* 2011; **198**: 230–6.
- 2 Warwick HMC. Cognitive therapy in the treatment of hypochondriasis. *Adv Psychiatr Treat* 1998; **4**: 285–91.
- 3 Kroenke K, Swindle R. Cognitive-behavioral therapy for somatization and symptom syndromes: a critical review of controlled clinical trials. *Psychother Psychosom* 2000; **69**: 205–15.