Reviewer’s report

Title: Blood spot collection as an alternative for participation in genetic association studies

Version: 1 Date: 19 June 2009

Reviewer: Thomas McDade

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The manuscript attempts to show that dried blood spot sampling may provide a means for increasing participation in epidemiologic studies by improving rates of compliance with blood collection. This is an important endeavor, and the investigators report on an innovative experimental approach to promoting compliance among participants who previously refused to give blood. There is one major flaw in the paper, which is well beyond the control of the authors at this point: two to nine years have passed between when participants refused venipuncture, and when they were asked to give a DBS sample. This limits generalizability of the findings from this study to future applications, where DBS may be proposed as an alternative to venipuncture shortly after refusal. Regardless, the paper is of interest and should be published.

Minor essential revisions
1. I have recently published a major review of the application of DBS sampling to epidemiologic/demographic studies that the authors might want to consult for additional information on the utility of DBS sampling, and on prior applications (McDade et al. 2007, Demography 44: 899-925). Joanne Mei has also published an excellent review that readers of this manuscript should be aware of (Mei et al. 2001, J Nutrition 131: 1631S-6S).

2. I assume all participants in this study were women, but that should be stated explicitly. Also, limitations on generalizability to men should be noted.

3. More details on DBS collection are needed. What lancet was used? Was self-collection recommended, or were participants encouraged to have someone else help?

4. How much time had passed between this study and the last contact the participants had with any study investigators? Was time since last contact a significant predictor of compliance?

5. The conclusion should discuss in more detail some of the limitations of the study, including the long time frame between initial refusal and the request for DBS, the select nature of the sample, and the absence of men.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.