The Bristol Diabetes and Diet Questionnaire: test-retest reliability, comparison with food diaries and feasibility study

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Abstract

Dietary advice is recognised as essential in the management of Type 2 diabetes. However, primary care health professionals have differing levels of nutritional knowledge and only a brief amount of time to devote to dietary matters. Consequently people express frustration in understanding what they can and cannot eat. Thus there is an identified need for tools that allow all health professionals to assess patients’ diets more rapidly, and provide advice based on that assessment.

Working with health professionals and people with Type 2 diabetes, a brief dietary questionnaire (the BDDQ) has been developed for people with Type 2 diabetes. This has undergone preliminary evaluation for test-retest reliability and comparison with food diaries in 50 people from the STAMP-2 cohort. The questionnaire showed good repeatability and, when compared with food diaries, showed similar agreement to brief questionnaires developed in other countries. However, the confidence intervals are wide and it is advised that brief questionnaires are evaluated in around 100 to 200 people. The proposed research comprises of dietary coding and analysis of a further 50-100 food diaries and BDDQs. The aim of this study is to confirm the results of the preliminary analysis, asking 1)Does the BDDQ demonstrate within-person test-retest reliability in a larger sample? 2)How does the BDDQ measurement of diet compare with 4-day food diaries in a larger sample?

Funding is also sought to enable the planning and initial set-up of a 2 month feasibility study of the BDDQ in 2 GP practices in Bristol. The aim of the study is to obtain knowledge about the most appropriate way to embed the BDDQ into general practice and to gain information about recruitment feasibility and the probable rate of patient recruitment. Feedback from practice nurses and patients on use of the BDDQ will be collected and used to design an RCT designed to test whether use of the BDDQ improves health outcomes. Additional funding to conduct the feasibility study has been sought from APCRC and UH Bristol RCF stream. In the longer term this work will lead towards an application to the NIHR for RPB to conduct a pilot RCT or from HTA or HS&DR funding to conduct the main RCT. Advice will be sought on whether a pilot is necessary.