Title: A pilot economic evaluation for SUpporting wellbeing through PEeR-Befriending (SUPERB)

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Background

There is evidence that the psychological needs of people with aphasia are greater than for the general stroke population (Kauhanen, 1999). SUPERB is a phase II randomised controlled trial exploring the feasibility of a peer-befriending intervention for people with aphasia post-stroke with low levels of emotional distress. As part of this trial, a pilot economic evaluation is being conducted.

Aims

Explore the feasibility of a full economic evaluation of usual care + peer befriending versus usual care control in a phase III RCT.

Methods

Single blind, mixed methods, parallel group phase II RCT comparing usual care + peer-befriending vs. usual care as control. Data on costs was collected on the stroke-adapted Client Service Receipt Inventory (CSRI) on service use (health, social, and voluntary) and associated costs at 4- and 10-months post-randomisation. Unit costs of resources used were derived from national sources such as the NHS reference costs and, where possible, from local sources. Health gains will be obtained from both the primary outcome, the General Health Questionnaire (GHQ-12) and the EQ-5D-5L. We will run two types of analyses: a pilot cost-effectiveness analysis based on GHQ-12 and a pilot cost-utility analysis using quality-adjusted life years (QALYs) based on the EQ-5D-5L. We will examine the cost outcomes, average costs, costs per participant and mean difference between trial arms, description of resources used and overall cost-effectiveness. With the pilot cost and outcome data, we will explore the calculation of confidence intervals for costs and health gains using non-parametric bootstrapping. Also, we will explore the application of probabilistic sensitivity analysis that will eventually generate cost-effectiveness acceptability curves in a Phase III RCT.

Results

56 participants were randomised into the trial. In terms of feasibility of data collection, at 4-months, 54 participants and at 10 months, 51 participants completed the CSRI. The primary method for collecting CSRI data was face-to-face (n=31) and data was primarily collected from the significant other (n=19) or person with aphasia (n=18). At 10 months, the primary method for collecting data was by telephone (n=31) and mostly from the person with aphasia (n=23) or significant other (n=20). There was at least 94% completion of CSRI questions. In terms of costs, with the exception of peer-befriending, which as expected, was higher in the intervention arm at 4- ($p<0.001$) and 10-months ($p=0.01$), and outpatient costs which were higher in the control arm at 10-months ($p=0.05$), there were no significant differences between the trial arms. Total cost per case [mean (SD)] at 4-months was £4,339 (£5,129) in the intervention arm versus £3,011 (£4,367) in the control arm [mean difference £1,328 (CI-£1213-£3869), $p=0.31$]. Total cost per case at 10-months was £5,590 (£8,437) in the intervention versus £3,712 (£6,320) in the control group [mean difference £1,878 (CI £-2,098-£5,855), $p=0.36$].

Discussion and conclusions

There were no significant differences between the trial arms on total costs. Peer-befriending has the potential to show further cost-effectiveness once the next stage of the analysis is complete. This will include considering costs alongside clinical outcomes for quality of life and mood. These analyses will allow for exploration of the uncertainty of cost data in conjunction with health outcomes to create confidence intervals around trial arm differences and the calculation of probabilities that the intervention is cost-effective given different thresholds of expenditure. These results will be reported at the conference presentation.

Preference for 1st and 2nd Choice Presentation Format: Poster presentation

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