

## Cognitive-behavioural therapy-based intervention to reduce fear of falling in older people: therapy development and randomised controlled trial - the Strategies for Increasing Independence, Confidence and Energy (STRIDE) study.

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### Abstract

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#### BACKGROUND

Falls cause fear, anxiety and loss of confidence, resulting in activity avoidance, social isolation and increasing frailty. The umbrella term for these problems is 'fear of falling', seen in up to 85% of older adults who fall. Evidence of effectiveness of physical and psychological interventions is limited, with no previous studies examining the role of an individually delivered cognitive-behavioural therapy (CBT) approach.

#### OBJECTIVES

**Primary objective** To develop and then determine the effectiveness of a new CBT intervention (CBTi) delivered by health-care assistants (HCAs) plus usual care compared with usual care alone in reducing fear of falling. **Secondary objectives** To measure the impact of the intervention on falls, injuries, functional abilities, anxiety/depression, quality of life, social participation and loneliness; investigate the acceptability of the intervention for patients, family members and professionals and factors that promote or inhibit its implementation; and measure the costs and benefits of the intervention.

#### DESIGN

Phase I CBTi development. Phase II Parallel-group patient randomised controlled trial (RCT) of the new CBTi plus usual care compared with usual care alone.

#### SETTING

Multidisciplinary falls services.

#### PARTICIPANTS

Consecutive community-dwelling older adults, both sexes, aged  $\geq 60$  years, with excessive or undue fear of falling per Falls Efficacy Scale-International (FES-I) score of  $> 23$ .

#### INTERVENTIONS

Phase I Development of the CBTi. The CBTi was developed following patient interviews and taught to HCAs to maximise the potential for uptake and generalisability to a UK NHS setting. Phase II RCT. The CBTi was delivered by HCAs weekly for 8 weeks, with a 6-month booster session plus usual care.

#### MAIN OUTCOME MEASURES

These were assessed at baseline, 8 weeks, 6 months and 12 months. **Primary outcome measure** Fear of falling measured by change in FES-I scores at 12 months. **Secondary outcome measures** These comprised falls, injuries, anxiety/depression [Hospital Anxiety and Depression Scale (HADS)], quality of life, social participation, loneliness and measures of physical function. There were process and health-economic evaluations alongside the trial.

## RESULTS

Four hundred and fifteen patients were recruited, with 210 patients randomised to CBTi group and 205 to the control group. There were significant reductions in mean FES-I [-4.02; 95% confidence interval (CI) -5.95 to -2.1], single-item numerical fear of falling scale (-1.42; 95% CI -1.87 to 1.07) and HADS (-1; 95% CI -1.6 to -0.3) scores at 12 months in the CBTi group compared with the usual care group. There were no differences in the other secondary outcome measures. Most patients found the CBTi acceptable. Factors affecting the delivery of the CBTi as part of routine practice were identified. There was no evidence that the intervention was cost-effective.

## CONCLUSIONS

Our new CBTi delivered by HCAs significantly improved fear of falling and depression scores in older adults who were attending falls services. There was no impact on other measures.

## FURTHER WORK

Further work should focus on a joint CBTi and physical training approach to fear of falling, more rational targeting of CBTi, the possibility of mixed group and individual CBTi, and the cost-effectiveness of provision of CBTi by non-specialists.

## TRIAL REGISTRATION

Current Controlled Trials ISRCTN78396615.

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