

Limited benefit from interventions for improving modifiable risk factor control in the secondary prevention of stroke

Clinical Question	How effective are stroke service interventions for implementing secondary stroke prevention strategies on modifiable risk control, including patient adherence to prescribed medications and the occurrence of secondary cardiovascular events?
Bottom Line	Educational and behavioural interventions showed no clear differences on any of the review outcomes, which included mean systolic and diastolic blood pressure (BP), mean body mass index, achievement of HbA1c target, lipid profile, mean HbA1c level, medication adherence, or recurrent cardiovascular events. There was moderate-quality evidence that organisational interventions resulted in improved BP control, in particular an improvement in achieving target BP. However, there were no significant changes in mean systolic BP and mean diastolic BP. There were no significant changes in the remaining review outcomes. Interventions targeted patients or clinicians, or both, (aimed at education or changing behaviour, or both); and organisations (e.g. changing the way services were provided).
Caveat	The available evidence was assessed as moderate- or low-quality because of variations in methods used and results reported. Most interventions lasted for between three and 12 months, with follow-up from three months up to three years.
Context	People who experience a stroke or transient ischaemic attack (TIA) are at risk of future stroke. Several medications and lifestyle changes can be used to lower stroke risk by improving the control of modifiable risk factors such as BP, blood fats, being overweight, raised blood sugar, and the use of preventive medications. These risk factors are often not managed effectively following a stroke or TIA.
Cochrane Systematic Review	Bridgwood B et al. Interventions for improving modifiable risk factor control in the secondary prevention of stroke. Cochrane Reviews, 2018, Issue 5. Art. No.: CD009103.DOI: 10.1002/14651858. CD009103.pub3. This review contains 42 studies involving 33,840 participants.

Pearls No 607, February 2019, written by Brian R McAvoy. C50

Cochrane systematic review link: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009103.pub3 /full