Secondary prevention lifestyle interventions for transient ischaemic attack, stroke: a systematic review

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Citation

Review question(s)
Review objectives:

1) To identify and critically appraise RCTs reporting secondary prevention lifestyle interventions for TIA/stroke.

2) To extract data from quantitative studies and meta-analyse, where possible.

3) To extract and collate data regarding educational content and behavioural change techniques and strategies.

Searches
Databases: AMED, ASSIA, Cochrane Systematic Reviews, CINAHL, DARE, DORIS, EMBASE, ERIC, HMIC, MEDLINE, PsycINFO, Social Services Abstracts

Grey literature sources: EthOS, Zetoc Conference Proceedings, pharmaceutical companies, key professionals, voluntary organisations

Restricted to: English language; years 1980-2014 (January)

Types of study to be included
Inclusion criteria:

randomised controlled trials

Exclusion criteria:

Epidemiological studies

Audit

Literature reviews

Clinical guidelines

Discussion/opinion papers

Condition or domain being studied
TIA/stroke secondary prevention, with particular reference to modifiable lifestyle factors.

Participants/population
Inclusion population:

Adults (>= 18 years);
stroke (i.e. ischaemic stroke, haemorrhagic stroke, subarachnoid haemorrhage, minor stroke, transient ischaemic attack).

Exclusions:
other diseases/conditions;
carers/family members/family caregivers (as sole focus);
health professionals (as sole focus).

**Intervention(s), exposure(s)**

Inclusion criteria:
Lifestyle interventions designed to address the prevention of TIA/Stroke recurrence
Multimodal (i.e. pharmacotherapy, education, and at least one lifestyle risk factor).

Exclusion criteria:
Public health/primary prevention initiatives and interventions;
Pharmacotherapy (as sole focus).

**Comparator(s)/ control**
All comparators/controls will be considered as part of the review.

**Context**
Studies will be sought and included from any relevant setting.

**Outcome(s)**

**Primary outcomes**
Primary outcome measures:
Lifestyle: behaviour change re tobacco use, alcohol consumption, diet, physical activity; psychosocial stress, medication compliance.

Physiological outcomes: e.g. blood pressure, blood sugar, blood lipids, weight, Body Mass Index, waist-hip ratio, waist circumference.

**Secondary outcomes**
Secondary outcome measures:
Psychological outcomes: wellbeing; life satisfaction; Quality of Life (QoL); self-rated health.

Learning outcomes: knowledge of: signs and symptoms of stroke, appropriate response, risk factors; health-related attitudes &/or beliefs.

Cardiovascular recurrence: incidence of recurrent cardiovascular events.

**Data extraction, (selection and coding)**
Quantitative data will be extracted from papers included in the review using a review-specific data extraction tool. Data extracted will include details regarding study methods, participant characteristics, intervention content, and outcomes.

Four researchers will be involved in data extraction, with discrepancies being resolved through team discussion and consensus.
Risk of bias (quality) assessment
Risk of Bias

Cochrane Collaboration Risk of Bias tool will be used.

Strategy for data synthesis
Data analysis

Data synthesis

Quantitative data will be pooled, where possible, in statistical meta-analysis. All results will be subject to double data entry. Odds ratio (for categorical data) and weighted mean differences (for continuous data) and their 95% confidence intervals will be calculated for analysis. Heterogeneity will be assessed using standard Chi-squared analyses. Where statistical pooling is not possible, findings will be presented in narrative form.

Analysis of subgroups or subsets
12-month data

Dissemination plans
Dissemination: results will be disseminated through local, national and international publications and conferences, and through the (UK) Stroke Association.

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Anticipated or actual start date
01 May 2012

Anticipated completion date
30 June 2014

Funding sources/sponsors
The Stroke Association
**Conflicts of interest**
None known

**Language**
English

**Country**
Scotland

**Subject index terms status**
Subject indexing assigned by CRD

**Subject index terms**
Acute Coronary Syndrome; Health Behavior; Humans; Ischemic Attack, Transient; Life Style; Secondary Prevention; Stroke

**Stage of review**
Completed but not published

**Date of registration in PROSPERO**
10 August 2012

**Date of publication of this revision**
17 June 2014

<table>
<thead>
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<th>Stage of review at time of this submission</th>
<th>Started</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary searches</td>
<td>Yes</td>
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<tr>
<td>Piloting of the study selection process</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Formal screening of search results against eligibility criteria</td>
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<td>Yes</td>
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<tr>
<td>Data extraction</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Risk of bias (quality) assessment</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Data analysis</td>
<td>Yes</td>
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