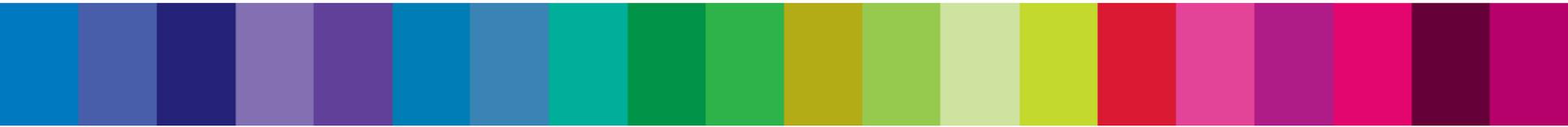


What works in non-pharmacological stroke secondary prevention: patient and family perspectives



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Outline

Background

Methods

Results

What does it all mean for practice?



Background



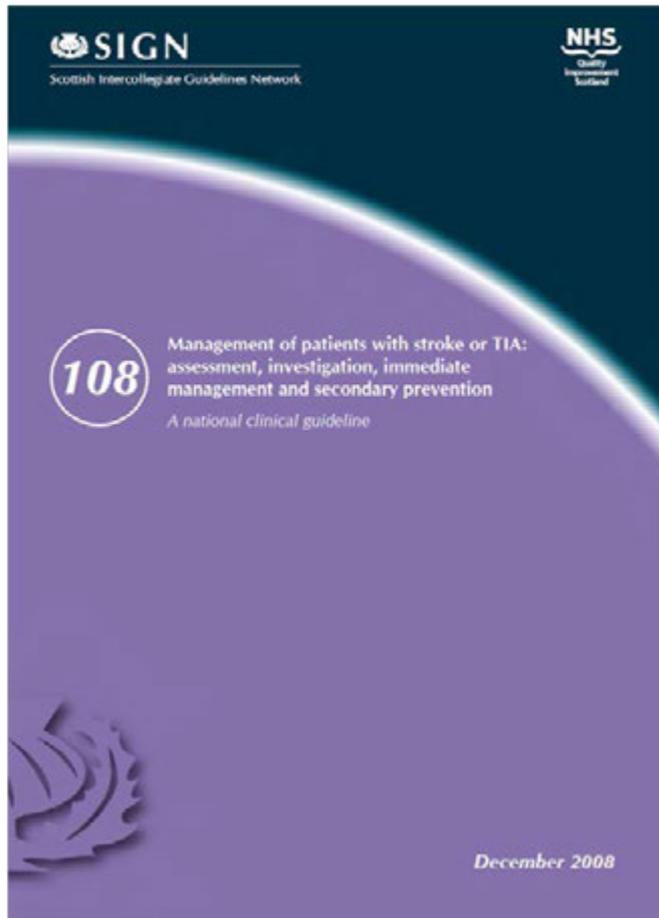
Background

Risk factors for recurrent stroke – same as for primary stroke

Some are related to lifestyle behaviours and are amenable to change



Background



Implementation of effective behavioral secondary prevention interventions is essential.

Little is known about the effectiveness of these interventions or how they are 'received' by participants.

To better understand these issues we undertook two systematic reviews.

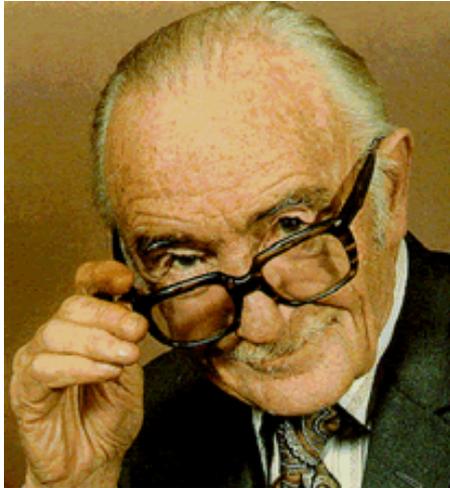
Methods

Systematic review and meta-analysis

Meta-aggregation



Methods



Archie Cochrane 1909–1988

We used Cochrane review methods to assess the effectiveness of behavioural secondary prevention interventions.

Month	Activity
1 - 2	Preparation of protocol
3 - 8	Searches: published & unpublished studies
2 - 3	Pilot test of eligibility criteria
3 - 8	Inclusion assessments
3	Pilot test of 'Risk of bias' assessment
3 - 10	Validity assessments
3	Pilot test of data collection/data extraction
3 - 10	Data collection/data extraction
3 - 10	Data entry
5 - 11	Follow up of missing information
8 - 10	Analysis
1 - 11	Preparation of review report
12 -	Keeping the review up-to-date

Methods



We undertook a qualitative review (a meta-aggregation), using methods developed by the Joanna Briggs Institute, to gain understanding of participants' perspectives of participation in behavioural interventions.



Meta-aggregation

Structured, process driven

Based on an a priori protocol

- Established question

- Explicit inclusion criteria

- Search strategy

- Quality appraisal tool(s)

- Data extraction

- Data synthesis

Two reviewers working independently

Results

Meta-analysis

Meta-aggregation



Systematic review descriptive results

23 papers reporting 20 randomised controlled trials

4 in Australasia; 4 in Asia; 7 in Europe; 5 in North America

6,373 participants

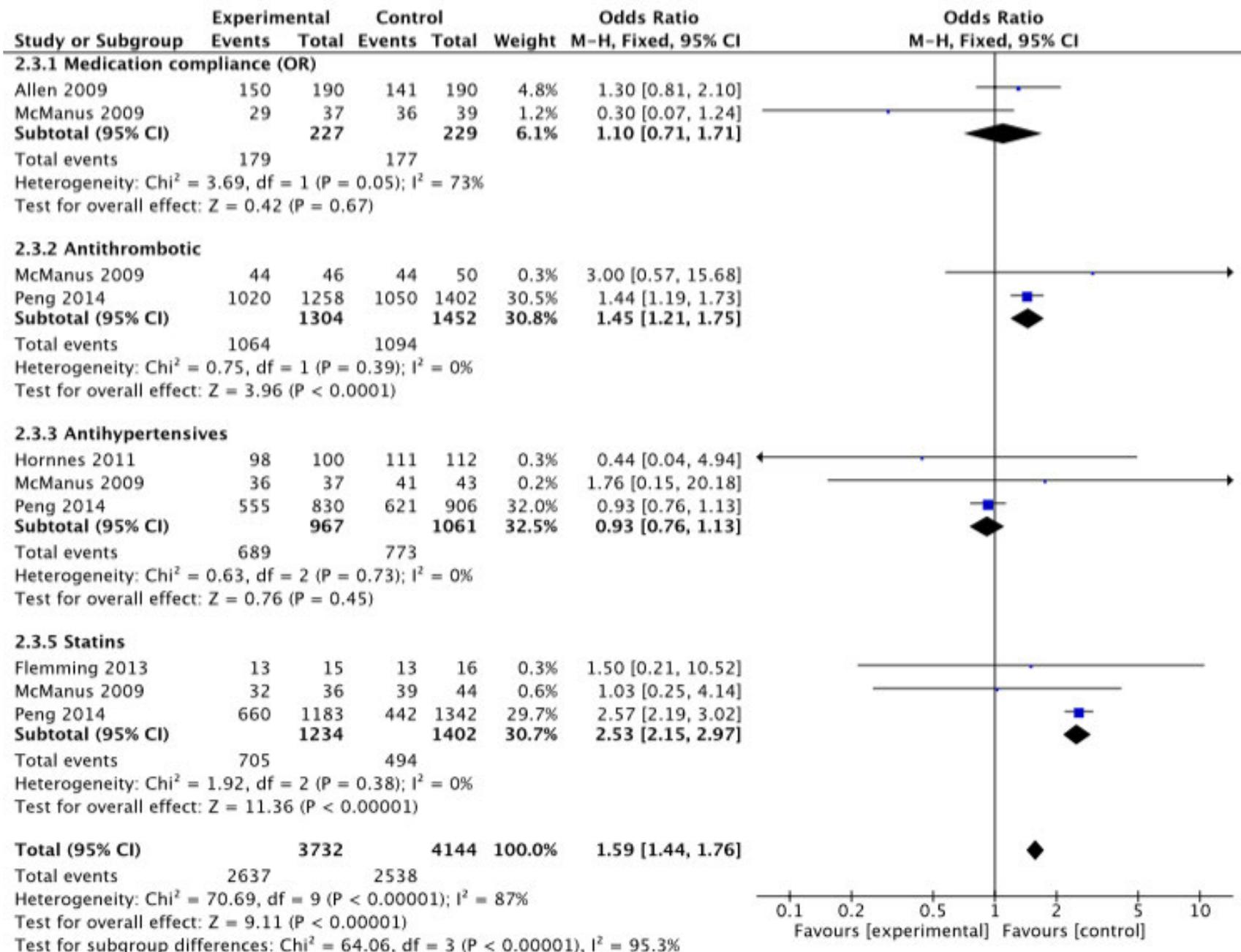
Mean age: 55–74 years

Group-based interventions: n=5

Meta-analysis

Significant changes:

- Systolic blood pressure (BP): -4.21 mmHg (mean) (-6.24 to -2.18, $p=0.01$ $I^2 = 58\%$, 1,407 participants)
- Diastolic BP: -2.03 mmHg (mean) (-3.19 to -0.87, $p=0.004$, $I^2 = 52\%$, 1,407 participants)
- Waist circumference: -6.69 cm (-11.44 to -1.93, $p=0.006$, $I^2 = 0\%$, 96 participants)
- Anxiety (Hospital Anxiety & Depression Scale): -1.20 (-1.77 to -0.63, $p<0.0001$, $I^2 = 85\%$, 143 participants)
- Recurrence of cardiac events: (OR 0.38, 0.16 to 0.88, $p=0.02$, $I^2 = 0\%$, 4,053 participants)



Qualitative review: descriptive results

5 papers (84 participants)

3 in UK; 1 in Canada; 1 in Australia

Mean age (across studies):
66 years

Community-based &
group-based

Incorporated education &
exercise



Meta-aggregation

3 overarching themes

Feeling Supported
Acquiring Knowledge
Gaining Confidence



Feeling Supported

that's what I found most fantastic . . . I thought, you know, there's other people out there that are going through the same thing as I'm going through & I wasn't alone in this thing. 'Cause I had nobody at home that I could talk to, that would understand [1, p. 9]



I thought the way it was conducted was very good. I had good encouragement but not too many "do this" & "do that" [2, p. 110]

It was exercise [that] was what I wanted. I mean, [in the hospital] . . . they give you a list of the exercises . . . but you don't have time to do it. But when you go [to the intervention] . . . you've got to do it. I think that's the important thing. They push you into doing it. And I've definitely come on since then [3, p. 20]

Acquiring Knowledge

I try & go to work with a lunch box, which I've never done before. You know, full of fruit & er, proper sandwiches & that sort of thing [5, p. 850]

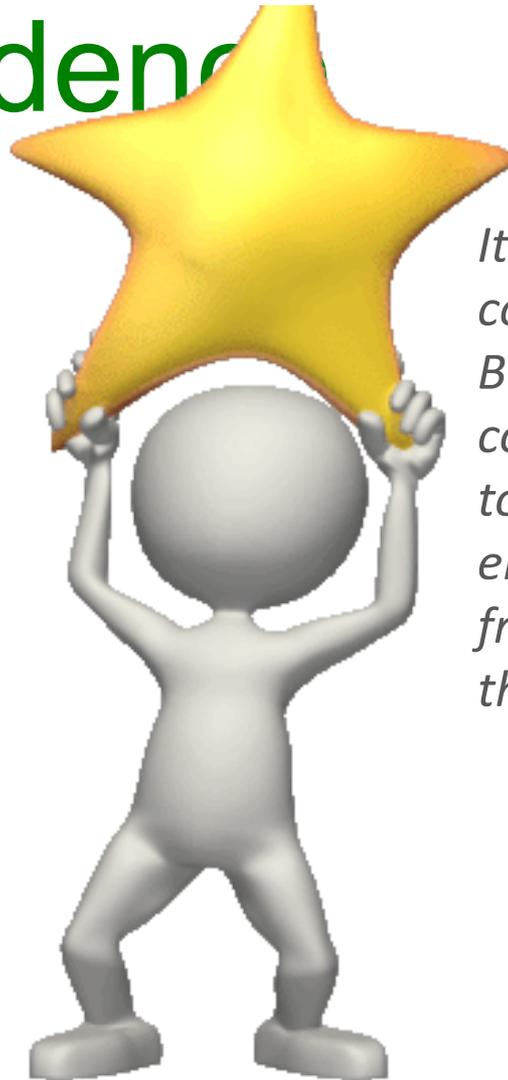
The professional chats about things were, were extremely useful . . . you came away from each session with something [2, p. 107]

I was interested in how many units of alcohol my husband should drink & what should be his diet & about the pills & that ... [the education sessions] gave me a bit of confidence & a bit of ammunition [2, p. 107]



Gaining Confidence

... her aim was to start her knitting again & you could see that she was quite pleased with herself . . . I consider that as a, a motivation for the group because . . . you know, that's really positive ... good things are happening in my group; it builds confidence, I guess [1, p. 9]



It was certainly a confidence booster. Being round people you could compare [yourself to] & you got the encouragement from any of the staff there [2, p. 109]

I think it's given me the courage to carry on . . . it buoys you up. It buoys you up to say there is a future out there, you will get better & you will carry on & do the things . . . that's what the ASPIRE has done to me [2, p. 114]

What does it mean for practice?



Summary of key findings

Physiological and psychological benefits may be derived from behavioural secondary prevention interventions, but these are limited and the findings are complex

From the participants' perspectives benefits include increased **social participation, knowledge** (stroke and healthy lifestyles), and **confidence**



What does it mean for practice?

Health professionals should consider implementing group-based secondary prevention interventions

The content of group-based secondary prevention interventions should be person-centred i.e. meaningful and relevant to the individual

Stroke survivors and family members are more likely to comply with advice and information provided by expert and experienced health professionals



References



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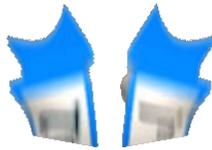
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