Structured education to promote walking in the non-surgical PAD patient

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NICE Pathways

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Into practice v

Guidance v

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However, supervised exercise training:

... is not widely available,

 24-36% of UK vascular surgeons have access to a supervised exercise programme [1,2]

... can suffer poor uptake

cardiac rehab: 27-41% [3]

... and high dropout,

up to 50% [4]

... and may not increase walking activity

e.g. Crowther et al. [5]

... therefore, exercise for claudication is usually promoted by advice alone

• but, this has limited efficacy:

Daily steps in Cunningham et al. [6]: Baseline 3826 ± 2313 4 months 3599 ± 3850 (p>0.05)

Walking capacity in Tew et al. [7]: Baseline 600 ± 300 m 12 weeks 626 ± 266 m (p>0.05)

What about structured, homebased exercise?

Mixed findings, some evidence of benefit*:

- <u>Cunningham et al. [6]</u>: Motivational interviewing, goal setting, action planning and telephone follow-up increased daily steps by 35% at 4-month follow-up
- <u>Wullink et al. [8]:</u> Health counselling, instruction and walking diary improved maximum walking distance by 11% at 24-week follow-up
- <u>Gardner et al. [9]:</u> Step monitor, instruction and regular feedback improved peak walking time by 31% at 12-month follow-up

... but generally poorly studied:

- non-controlled/non-randomised designs
- no/poor quantification of exercise performed
- inadequate use of behaviour change techniques

Current study

Aims:

- To develop a pragmatic structured education programme aimed at modifying illness perceptions and increasing walking activity in patients with intermittent claudication
- To explore the suitability of the education programme for a subsequent definitive randomised controlled trial



What should a structured patient education programme include? (NICE criteria [10])

- Underpinning philosophy
- Suits the needs of the individual
- Specific aims and learning objectives
- Supports the development of self-management attitudes, beliefs, knowledge and skills
- Structured, written curriculum: evidence-based, theory-driven, resource-effective, having supporting materials
- Appropriately trained educators
- Quality-assured programme
- Outcomes regularly audited

Programme development

- Focus groups (at least 5 groups of 5)
- Test and refine (at least 2 groups of 6)

3-hour education workshop:Patient storyProfessional storyWalking behaviour

Pedometer and exercise diary

Follow-up telephone call (after 2 weeks) How do you change PA behaviour?

(an evidence-based approach)

40 strategies identified* 5 strategies work well**

Self-monitoring Feedback Prompt intention forming Prompt goal setting Prompt goal review

Potency

* Michie S, Ashford S, Sniehotta FF, et al.: A refined taxonomy of behavior change techniques to help people change their physical activity and healthy eating behaviours: the CALO-RE taxonomy. Psychol Health. 2011, 26:1479-1498. ** Michie *et al.* (2009) Effective techniques in healthy eating and PA interventions: a meta-regression. Health Psychology, 28(6):690-701

Education workshop

- <u>Patient story</u>: Share experiences and perceptions of condition, highlight concerns want addressing
- <u>Professional story</u>: Overview of the condition using simple language and visual aids (causes, risk factors, complications), feedback on important health measures, identify personal modifiable risk factors
- <u>Walking behaviour</u>: Overview of health consequences of physical inactivity and how walking might be useful, feedback on activity status, discuss activity options and barriers, action planning and goal setting, demonstration of pedometer

Programme suitability



- <u>Participants</u>: >18 years, can exercise safely, not in another study, English speaking
- Recruitment rate, compliance, acceptability

See you next year for the results!

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