“You started something…then I continued by myself”: a qualitative study of physical activity maintenance

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Physical activity and health

- People who engage in regular physical activity (PA) have better health outcomes

- At least 20 conditions where PA helps to prevent disease or complications from disease

- Inactivity causes 9% of premature mortality worldwide

- DH and WHO guidelines recommend 150 minutes of moderate-to-vigorous physical activity (MVPA) in bouts of 10 minutes or more across a week

- 67% of men and 55% of women meeting guidelines

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1 Department of Health. Start Active, Stay Active. CMO Report 2011
2 Lee et al. Lancet 2012
3 WHO. Global Recommendation on PA for Health 2010
4 Health Survey for England 2012
1023 inactive 45-75 year olds from 7 South West London GP surgeries

Random allocation

Control
Usual activity
338 participants

Postal
Pedometer intervention with handbook + diary
339 participants

Nurse support
Pedometer intervention with handbook, diary + 3 nurse PA consultations
346 participants
956 (93%) participants provided PA outcome data

Main outcomes:

Both interventions increased steps by ~ 10% & MVPA in bouts by a third at 12m

Nurse delivery had greater effect than postal at 3m, by 12m effects were similar
Background:

• Little is known about long-term sustainability of PA interventions

• Are effects maintained beyond 12m?

• Meta-analysis included only 4 studies beyond 12m (all self-report)¹

• Cochrane called for trials with longer follow-up & objective PA measures²

¹Hobbs et al. BMC Med 2013, ²Hillsdon et al. 2013
Qualitative evaluation

• Why include a qualitative strand? Quantitative tells you whether but not how or why

Aim:
• to explore barriers and facilitators to PA maintenance 3 years post intervention
• to explore the role of resources to aid PA maintenance

• 60 randomly selected participants (20 from each arm of the trial)

• Telephone interviews conducted, audio-recorded, transcribed verbatim and coded

• Thematic analysis performed
Themes and sub-themes

1. Long term impact of PACE-UP
   - Increased awareness
   - Lifestyle changes
   - Pedometer use

2. 

3. Resources to aid physical activity maintenance
(1) Long term impact of PACE-UP

Increased awareness

‘I think it’s made me more aware. Well as soon as I started the trial, I started thinking of the physical side of my life, and whether I was, you know, how much exercise I was doing and so it was informative because I didn't realise that you were supposed to try and get out of breath, once a day.’ F63

Lifestyle changes

‘I now walk to places I would have normally driven’. M75

I walk up the escalators to get my little bit of exercise. M62

Pedometer use

‘…before the PACE-UP trial I had no incentive. And that really did help me. That put me / gave me the first steps as it were, got me on the right track’ F51
(2) Facilitators and Barriers to physical activity maintenance

Weather and season

‘It depends on the weather for me…sometimes when the weather is fantastic and you wake up and the sun is shining, I can't wait to get out, and then on the days when you wake up and it's so grey, the mood just isn't there.’ F63

‘I toyed with the idea of walking in to xxxxxx yesterday and I certainly had the time but the rain came down and it put me off’ M64

Health

‘The more active I am, the better the arthritis is, so I know if I've sat down for even more than half an hour, when I get up, I'm stiff, so I know to keep myself lubricated. I need to be walking as much as possible’ F61

‘I've got an ongoing problem where I get pain, so there's no way I'm going to be going out walking if I don't have to.’ F61
Ageing process

‘...you’re only as good as your sort of last day I think at my age, something's going to strike me down at some point, but there are things that I can do to help myself, and one of those is exercise.’ M67

‘I used to, you know, play squash and I used to coach rugby and I played hockey and things like that, I don't do those things any more. Sometimes I think I should but it’s / as you get older it gets a bit harder to do them.’ M58

Social support

‘I do have a friend that I walk with on a Thursday, so I'll say, ooh, I don't really feel like walking today and she'll say, oh come on, get a move on, and she'll / we'll just both say oh shall we walk just a little bit further and we'll walk a little bit further, or you know / or push each other up the hill in a way, so we motivate each other …’ F52

‘I like walking but umm my friend, that I used to go walking with quite a lot, has moved away, so there's not so much incentive now to go for a walk’ F59
Self-motivation

‘I think it comes from you. You have to want to do these things don't you …’ F49

‘In my area … the resources are there it is just for me to be a bit more committed, a bit more motivated, to do it.’ F57

Time

‘It's not because I don't want to do it, you see, it's because I find it difficult to fit it in. So, it's not because I don't want to do the exercise, or the / or you know / or that I haven't got the motivation to do it, it is just finding time.’ F54

‘I work between 30 and 40 hours a week still and I don't actually have much time for anything else at the moment, nor do I have a lot of energy left.’ F69
(3) Resources to aid physical activity maintenance

Text messages and online resources

Some favoured the idea of being able to go online at their ‘own time’ (F62) to find PA guidance and viewed text messages as ‘intrusive’ (M56) and a ‘nuisance’ (F52)

Others preferred the idea of regular text message reminders to be physically active and felt that they would be less likely to view online resources as that required them to be ‘a bit more proactive’ (F51)

Regular nurse appointments

‘I was probably more motivated through the trial than I was once that stopped, so if I had a regular point / an appointment that meant I checked in with somebody on a regular basis, I'd probably be more motivated, so external accountability has always been quite useful.” (M66)

Additional ideas

• Holistic approach
• More opportunities for older people
Conclusions

• 3 years post-intervention PACE-UP increased physical activity awareness

• Many factors acted as facilitators and/or barriers to physical activity

• The challenge for future interventions:
  ❖ how to transform barriers to facilitators e.g., physical health
  ❖ how to overcome barriers e.g., time

• Ideas for encouraging physical activity maintenance need to be taken into consideration when planning and designing larger trials
Acknowledgments:

- Dr Tess Harris
- Carole Beighton
- Prof Christina Victor
- Dr Rebecca Normansell

- The rest of the PACE-UP trial team
- PACE-UP participants

Funded and supported by:
HTA programme
CLAHRC – South London
Thank you for listening – keep walking!

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www.paceup.sgul.ac.uk
Walking programme

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<thead>
<tr>
<th>Week</th>
<th>Target number of steps (add to their baseline)</th>
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<tbody>
<tr>
<td>1-2</td>
<td>+1500 steps on ≥3 days/week</td>
</tr>
<tr>
<td>3-4</td>
<td>+1500 steps on ≥5 days/week</td>
</tr>
<tr>
<td>5-6</td>
<td>+3000 steps on ≥3 days/week</td>
</tr>
<tr>
<td>7-12</td>
<td>+3000 steps on ≥5 days/week</td>
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Remember
1500 steps = about 15 minutes of walking
3000 steps = about 30 minutes of walking

Your baseline daily average step-count was......... By the end of 12 weeks, the aim is for you to walk an extra 3000 steps most days. If you can do this your average daily steps should have increased to about................
INTERVIEW SCHEDULE

1. Can you tell me about what physical activity you did last week? Was that a typical week for you?

2. Do you think taking part in the PACE-UP trial has changed the physical activity you are doing now?

3. Is there anything about the PACE-UP trial that you particularly remember? *i.e. take home message*

4. Do still you use the pedometer, diary or handbook given to you after the PACE-UP trial? If so, how often do you use them? *If no, do you use anything else? *i.e phone, fitbit.*

5. What normally motivates you to be physically active?

6. Is that different to how it was before you participated in PACE-UP?

7. Would you recommend the PACE-UP trial to family and friends?

8. Are there any additional resources or support that you could suggest that might help to keep you physically active? *i.e family, friends, text messages, online resources, annual visit to nurse, walking groups….*