Use and perceptions of activity monitors and health coaching in community dwelling seniors

Presented by
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Background

Two major public health issues:

1. **Physical inactivity in older age**
   Older people are particularly inactive
   Approximately 76% of Australians aged 75 years+ do not meet physical activity guidelines (Australian Health Survey: Physical Activity, 2011-12)

2. **Falls in older age**
   1 in 3 community-dwelling people aged 65 years+ fall at least once/year
   Consequences are enormous - social, economic, ongoing disability
Background

Strategies for promoting physical activity:

Activity monitors
Heath GW et al (2012)\(^1\) - pedometers had greater effects on physical activity than other intervention strategies (informational, behavioural and social approaches)

Health coaching
Oliveira JS et al (2017)\(^2\) - health coaching effective in improving physical activity participation (in systematic review)

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Background

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STUDY PROTOCOL

What is the effect of a combined physical activity and fall prevention intervention enhanced with health coaching and pedometers on older adults’ physical activity levels and mobility-related goals?: Study protocol for a randomised controlled trial

Anne Tiedemann, Serene Paul, Elisabeth Ramsay, Sandra D O’Rourke, Kathryn Chamberlain, Catherine Kirkham, Dafna Merom, Nicola Fairhall, Juliana S Oliveira, Leanne Hassett and Catherine Sherrington.
Aims of current study

➢ To evaluate uptake and perceptions of an intervention aimed at increasing physical activity participation and reducing fall risk with health coaching and Fitbit activity monitors

➢ Results will inform the methods to be used for widespread implementation of the intervention if shown to be effective

Participant preferences and program adherence important considerations for any implementation
Methods

- **Participant inclusion criteria:**
  - intervention group participants who had completed 6 month follow-up
  - aged 60 years and over
  - living at home
  - cognitively intact (Memory Impairment Screen > 5/8)
  - regular access to the internet
  - no medical conditions precluding exercise or progressive neurological condition
  - no fall screen in last year AND does not meet current physical activity guidelines
Methods

- **Intervention:**
  - One home visit: identify fall risks (QuickScreen), address risk factors, set up a Fitbit pedometer, health coaching / goal setting / motivational interviewing encouraging physical activity
  - Fortnightly health coaching phone calls for 6 months: barriers, strengths, strategies
Methods

➢ **Study measures:** Postal survey completed at the end of 6 months asking about compliance with and perceptions of the intervention:

- Benefit of the program
- Use of Fitbit pedometer
- What aspects of the Fitbit software used
- How often was the activity information downloaded
- How useful was the goal setting and health coaching

➢ **Analyses:** descriptive statistics used to summarise survey responses
Results

- **Participants:**
  - 42 people
  - 64% female
  - Mean age 67.2 years (range 60 – 81 years)
  - 9 participants had fallen in the past year
Results: Overall impression of program

Overall was the program of benefit to you?

- Yes: 81%
- No: 2%
- Unsure: 17%

- It makes me more mindful of what and how I do various activities
- Made me view walking / exercise more positively
- I have exercised regularly for a number of years so I do not see myself as needing to be encouraged to engage in physical activity. Yet the program did encourage me to think about how much activity I was doing and to aim for more, to do more
- It would have been more useful if I had not been too busy at work
Results: Use of Fitbit pedometer

Did you regularly wear the Fitbit pedometer during the past 6 months?

- Every day: 69%
- Most days: 31%

- Sometimes I forgot to wear the fitbit and became very tired from physical activity. Weather and moods unpredictable. To fit in all this activity and keep up with housework, shopping, cooking and resting after 3pm because of tiredness..

- 98% said they would wear the Fitbit for the next 6 months
Results: Use of Fitbit pedometer

- Encouraged me to walk and stand instead of sitting

- I didn’t feel my pattern of activity has changed significantly. Fitbit is interesting to wear for a short time but a bit tedious to wear all the time. But it may have motivated me to compete with myself to maintain or raise walking distances
Results: Goal setting and health coaching

- Very useful: 67%
- Somewhat useful: 21%
- Slightly useful: 12%

- I owe everything to my walking program...Thank you for support and chats. So good to have one on one communication with such a supportive and delightful person

- Difficulty in decent catch ups with health coach due to work commitments and general availability
Conclusions

Small sample overall shows that

- an intervention with pedometer and health coaching was feasible and well-received in seniors with a range of ages and activity levels

- Currently being tested in larger trial (600 participants) funded by NHMRC Project Grant
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