Being sedentary when you live with a long-term condition and have symptoms of depression- A thematic analysis

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Background

Depression and Long Term Conditions (LTCs)

Depression occurs more commonly in people with LTCs (Barnett, Mercer et al. 2012)


Associated with poorer self-management behaviours (Ciechanowski, Katon et al. 2003)
Any activity that requires the use of energy above that used in a resting state (a metabolic rate of 1-1.5 Metabolic Equivalent or METs) (Ainsworth 2000)

Increase in physical activity associated with
- reduction in depression symptoms (Cooney, Dwan et al. 2013)
- Improved physical health (Garcia-Aymerich, Lange et al. 2006)

Increasing the frequency and duration of physical activity leads to spending less time sedentary
- Time spent sedentary is an independent predictor of poorer health outcomes (Tremblay, Colley et al. 2010).
The Problem

❖ Paucity of research- (Rogerson, Murphy et al. 2012)

❖ Limited to exercise as a form of physical activity
  - Exercise typically construed by research participants as sport or gym attendance (J. McGowan, Devereux-Fitzgerald et al. 2017)

❖ Physical activity and sedentary behaviours may have different barriers and facilitators
  - We need to explore barriers and facilitators to sedentary behaviours

❖ Social support from family and friends has not been explored in depth
  - Exploring the social environment or context in which behaviours occur helps to understand why the behaviours occur (Michie, Atkins et al. 2014)
Research Aims

1. To explore day to day activities of people with symptoms of depression and LTCs, and to examine barriers and facilitators for both being active and for being sedentary.

2. To explore how family members and friends supported them in doing physical activity or sedentary.

3. To identify factors that might be important for the development of behaviour change interventions to increase physical activity in people with symptoms of depression and LTCs.
Data collection and analysis

Semi-structured interviews

• 19 participants with LTCs
  – Score ≥8 on the HADS depression subscale
  – Recruited online, through NHS database, posters and flyers at GP practices
  – 11 were female, mean age was 49, range of LTCs- diabetes, asthma, arthritis

• 11 family and friends
  – Recruited through participants with LTCs, online and NHS databases
  – 7 female, mean age 53

Interviews recorded and transcribed verbatim

Data analysed thematically
Results

Physical activity
- "anything that is not lying in bed" (Interview5)
- short bursts

Sedentary Behaviours
- Typically watching television, using the computer, and listening to audiobooks
- Most of the day

Four key themes
I. commitments and social norms
II. coping with pain and fatigue
III. keeping busy alongside low mood and worries
IV. the impact of environmental factors
I. Commitments and social norms

Having pre-arranged and regular commitments were drivers to being physically active

“I go every Monday to a pub quiz with both of my [grown up] children as an excuse to meet up once a week because they like a quiz, I like a quiz, and then we actually get together and do something at least once a week. So it's more a case of keeping the family together, so to speak.” Interview19, diabetes, coronary heart disease

Social norms were drivers to sedentary behaviours

“We just have either talking points on TV shows or stuff we find funny we can laugh together”. Family member or friend - Interview8
Results

II. Coping with pain and fatigue

Experiencing pain and fatigue were barriers to physical activity

- Pain and fatigue was caused by LTCs and through over-exertion

“[Fatigue] makes you stop. You try and pace yourself but it’s really difficult to do, because when you’re feeling like you can do stuff, you do stuff and then it’s only afterwards, the next day or the day after… it just feels like gravity is really, really strong and it’s just sucking you down…” Interview13, fibromyalgia, osteoarthritis

Pain and fatigue were drivers to sedentary behaviours, specifically for watching television or using the computer

- These behaviours could be a distraction to cope with pain

“I just sit on the couch and try to watch a series because if I try to work then I still think about being in pain and so it’s constant” Interview1, fibromyalgia.
Results

II. Coping with pain and fatigue (cont)

Pain and fatigue hindered participants from making future plans and commitments

“We can have a big long chat at night and he’d be full of good intentions; this is what I’m going to do all week, I can’t wait. then he’ll wake up on Monday and it’s a bad day” – Family member or friend - Interview 2

Experiencing pain could also be a barrier to being sedentary

“I spend most of the day sat down. So I just move about more because if I sit in the same position for too long, it’s when my legs start getting the pains again. I can last probably about half an hour or so and then I’ll go and move about, have a bit of a walk around inside” – Interview 4, male 54, diabetes, hypertension, asthma, chronic pain
Results

III. Keeping busy alongside low mood and worries

Participants associated low mood with pain and fatigue

“Pain and fatigue just make you really…it really gets you down. I think disability kind of changes you.” Interview13 fibromyalgia, osteoarthritis

Watching television or using the computer was seen as an alternative to going out

I wouldn’t say I enjoyed watching tv. It’s just a distraction. It’s easy, it doesn’t involve going out, which I struggle with. Interview2 Chronic pain
Results

III. Keeping busy alongside low mood and worries (cont)

Planning activities could increase feelings of anxiety

“it doesn’t work if I plan it. I have to sort of suddenly say, right, now I'm going to do whatever. If I planned it yesterday I'd be up all night thinking about it. I have to do it when… I have to just do it now” Interview 12, 73, COPD, arthritis

Family and friends provided encouragement and helped with planning activities

“My friend could phone and say, do you want to go [out] today? And I go, oh, I don’t know if I…oh, go on and she’ll talk me into going and it does you good when you do it”. Interview 14, diabetes, arthritis, irritable bowel syndrome.
Results

IV. The impact of environmental factors

Barriers to physical activity within the environment were perceived more negatively due to pain, fatigue, low mood, and worries

- Barriers included the weather, poor accessibility of public transport, cost of activities

  with my knee, I feel the damp weather, and so far this year we haven’t had two days of sunshine to rub together. So there’s no days when I’m waking up and not aching. Interview17, COPD, diabetes, chronic pain

Family and friends helped to alleviate environmental barriers

if it’s a longer trip and he hasn’t been there before, he likes to have some company because he doesn’t know if he’s going to have trouble with pavements, or how to get on and off the transport- family member or friend, Interview7
Summary of Findings

There are subtle differences in the explanations for physical activity and sedentary behaviours.

Doing short bursts of high intensity activities, or engaging in mild physically activity for long periods of time could increase pain and fatigue, which in turn could exacerbate symptoms of depression.

Family and friends helped to alleviate all of the barriers to physical activity, but also played a role in maintaining sedentary behaviours. Making plans to see family and friends outside of home was an important driver to physical activity.
The findings illustrate the importance of understanding barriers and facilitators to both physical activity and sedentary behaviours.

A behaviour change intervention designed to substitute sedentary behaviours with mild physical activity could help break up long periods of sedentariness.

The themes within the qualitative study suggest that candidate behaviour change techniques could be: behaviour substitution, habit reversal, action planning, and practical and emotional social support.
Thank you

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