

# Sedentary behaviour in stroke survivors: a qualitative study involving stroke survivors, caregivers and staff in two stroke services

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## RESEARCH PROBLEM

Stroke survivors are more sedentary than healthy age-matched controls, independent of functional capacity, even one year after stroke (Tieges et al., 2015). Given the often debilitating effects of stroke, reducing sedentary behaviour might be more achievable than increasing moderate-vigorous intensity physical activity. Before intervening, it is important to understand current perceptions and behaviours relating to sedentary behaviour after stroke.

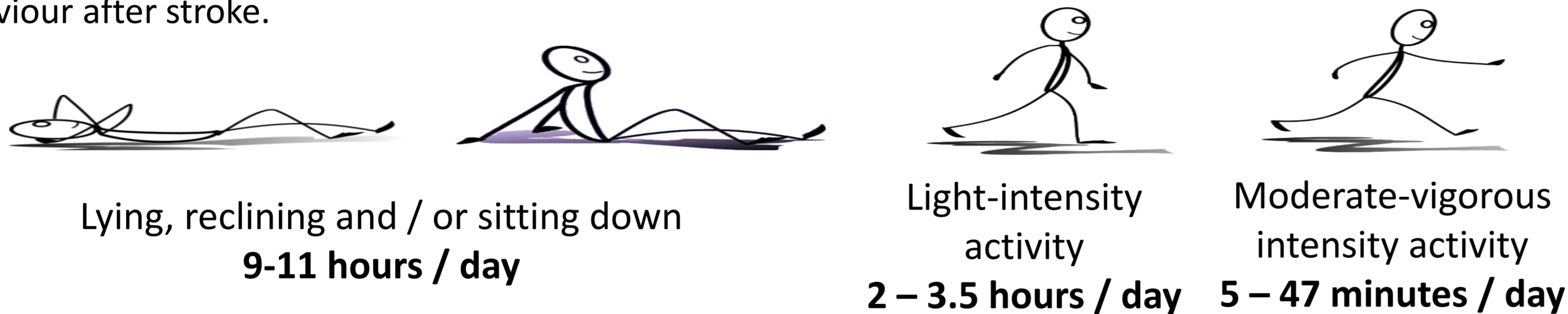


Figure 1.0. Stroke survivors' physical behaviour across the day, based on a systematic review of the existing literature (Cornwall et al., in preparation)

## RESEARCH METHOD

- (1) We observed inpatient and linked community stroke service settings in Edinburgh (64 hours) and in West Yorkshire (69 hours)**
  - To understand routine practices and behaviours.
  - We observed 25 stroke survivors, 5 caregivers, and 78 staff members
- (2) We interviewed 31 stroke survivors, 12 caregivers, and 30 staff**
  - To understand perceptions of sedentary behaviour, and barriers and facilitators to reducing sedentary behaviour, or supporting stroke survivors to reduce sedentary behaviour

## RESEARCH FINDINGS

This poster presents three key findings:

### Key finding 1: Staff work practices provide opportunities to support stroke survivors to reduce sedentary behaviour

- Observations indicate that staff do not regularly discuss sedentary behaviour with stroke survivors
- Routine staff activities *indirectly* contribute to stroke survivors breaking up sedentary behaviour, e.g. involving stroke survivors in personal care activities
- Opportunities to integrate interactions around sedentary behaviour into routine staff activities were identified, e.g. community service discharge visit

*"Obviously if they were really struggling I would probably help them a bit more but I would always... if they can do it themselves, encourage to do it themselves"* (Health Care Support Worker)



### Key finding 2: Staff and patient understanding of sedentary behaviour

- Staff understanding of sedentary behaviour did not correspond with the accepted definition.
- Common staff misconceptions included sitting and engaging in cognitive activities, e.g. occupational therapy tasks constituting breaking up sedentary behaviour
- Stroke survivors were more concerned with being occupied than with whether they were being active or sedentary
- Stroke survivors preferred meaningful / purposeful strategies to break up sedentary behaviour, e.g. making a cup of tea preferred over doing ten sit-to-stands

*"If someone wasn't engaging in any form of previous activity... then that would, to me, have been sedentary behaviour, and I would talk to patients about being sedentary, and the benefits of any form of activity, be it cognitive activity, as well as physical"* (Occupational Therapist)

*"You break up the time that you sit when it is personally or socially convenient to do it... If you spend your whole day walking 10,000 steps then that seems to me to be a waste of time, you walk 10,000 steps because it's part of everyday living and you're doing something productive... then it's worth doing"* (Stroke survivor)

C- *"He's tired, he gets to a certain point in the day and you can see he's had enough, his body's said no, that's it"*  
 P- *"And it's like me leg, me leg gives way after so long"*  
 C- *"His balance and stability go"* (Caregiver and patient)



### Key finding 3: There is not a typical stroke survivor experience

- Stroke survivors have different reasons, barriers and motivations related to reducing time spent sedentary
- Understanding the importance of health behaviours on stroke reoccurrence is an important motivating factor for lifestyle change after stroke
- Consequences of the stroke, which influence capability and motivation to reduce sedentary behaviour, differ e.g. cognitive impairments, impact on mood, physical capability to stand and mobilise

## WHAT'S NEXT?



A co-production process to develop an intervention to reduce and break up time spent sitting commenced in October 2018. Key findings from this study are being utilised during the intervention development process. The intervention development process is underpinned by the Behaviour Change Wheel approach to developing interventions and the capability, opportunity and motivation (COM-B) model for understanding behaviour. The produced intervention will be tested and refined as part of a feasibility study in three different sites, before being evaluated in a 34-site cluster randomised controlled trial (RCT) and accompanying process evaluation.

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For more information about this research study or the wider programme grant please contact:  
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