CO-PRODUCING A COMPLEX INTERVENTION TO REDUCE SEDENTARY BEHAVIOUR AFTER STROKE: CHALLENGES AND SOLUTIONS

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Co-producing a complex intervention to reduce sedentary behaviour after stroke: challenges and solutions

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Background

Stroke survivors are highly sedentary; breaking up long uninterrupted bouts of sedentary behaviour could have substantial health benefit. However, intervention strategies tailored for this population are lacking. Co-production methods that involve end user groups in the research process, consulting them at all stages of development, are highly valued in quality improvement work to enhance users' experiences and satisfaction with services. However, their use in complex intervention development is less commonly reported. We report on a co-production approach designed to develop an evidence informed intervention, utilising 'lived expertise' of stroke survivors, their caregivers, and stroke service staff, to reduce sedentary behaviour after stroke.

Methods

Five co-production workshops at two UK sites - one in England; one in Scotland with 17 stroke survivors, 7 of their caregivers, 17 stroke service and exercise professionals, and 6 researchers. Interactions were recorded, and analysis of outputs from each workshop informed subsequent workshops.

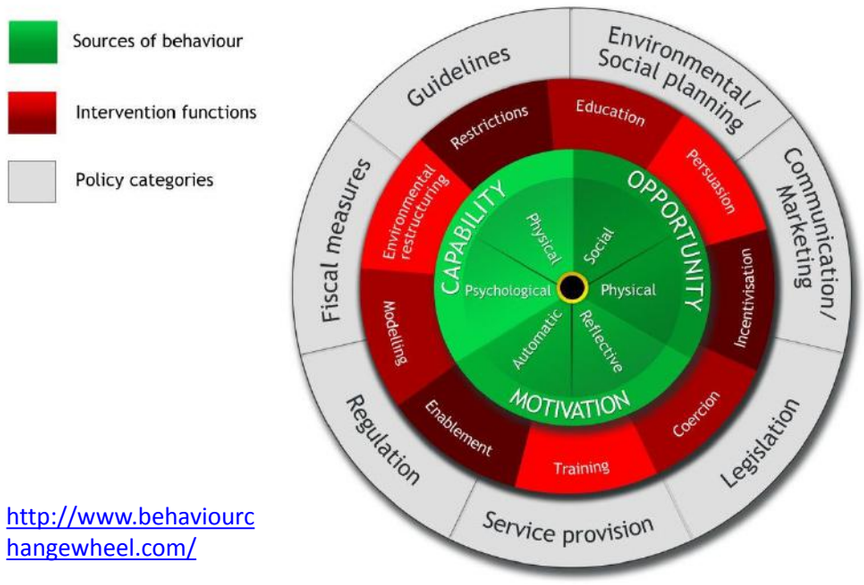
Workshop 1
- Introduced the concept of sedentary behaviour and the co-production approaches that were planned to be used in subsequent workshops.

Workshop 2
- Specified the target behaviours (i.e. reducing sedentary behaviour) and explored barriers and facilitators to changing the target behaviours.

Workshop 3
- Brainstormed and agreed solutions to address the target behaviours which had been defined during workshop 2.

Workshop 4
- Presented a list of components that together formed a proposed solution, and completed a validation activity to confirm and refine the proposed solution.

Workshop 5
- Prototype materials were introduced to the participants, they were discussed and feedback was used to further refine the proposed solution ahead of testing.



http://www.behaviourchangewheel.com/

Workshop processes were informed by the Behaviour Change Wheel (BCW) framework for designing interventions, and incorporated systematic review and empirical evidence.

Challenges and Solutions

The Behaviour Change Wheel is a well-established framework for developing interventions. It has less frequently been used in combination with co-production processes. There are numerous benefits in using these approaches, including a defined framework that guides, in a step-by-step format, the development of the intervention, resulting in effective facilitation of workshops in a systematic and structured way, while the introduction of co-production permits creativity and open-thinking to occur. However, taking this approach was not without challenges, and below are suggested some key findings for practitioners considering implementing this approach as part of an intervention development study:

- **Presenting data effectively** - data were presented to workshop participants to permit them to make suggestions for a solution that involved both their own 'lived experience' and evidence on the subject. Workshop facilitators were required to be actively aware of developing materials for the workshops that were informative without overwhelming participants.
- **Effective time management** - since each workshop was just two hours in duration, facilitators were required effectively manage the time and activity schedule to balance data collection activity and ensuring stroke survivors and caregivers were able to input their views, and felt value in doing so. Some materials were also provided to participants in advance of workshops, to permit additional reading and familiarisation time ahead of workshop discussions.
- **Actively valuing participant input** – it was imperative that workshop participants felt they played an integral part in developing the solution. To do this facilitators provided constructive feedback on suggested solutions, discussed how these might work in practice, and considered how individual solutions could be combined to formulate one complex intervention.

Conclusions

Using the BCW to guide the co-production process encouraged workshop participants to consider a full range of intervention options. A collaborative and iterative co-production approach can successfully contribute to the development of a robust intervention with potential for integration into stroke care pathways. The next step is to test this intervention in a feasibility trial.

RECREATE
Reducing sedentary behaviour after stroke

For more information about this research study or the wider programme grant please contact: Dr Sarah Morton, Research Fellow - sarah.morton@ed.ac.uk

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