

Factors Influencing Implementation of Aerobic Exercise after Stroke: A Systematic Review



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Background

> Evidence supports aerobic exercise as an intervention for individuals post-stroke, but there is currently minimal provision in stroke rehabilitation in the United Kingdom.

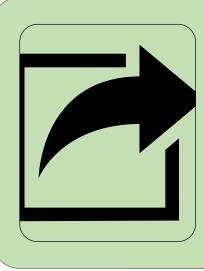
Aim

> To explore the perspectives of healthcare, exercise and fitness professionals working within stroke rehabilitation on the factors affecting the implementation of aerobic exercise after stroke.

Methods	PRISMA Flow Diagram	Results
OVID SP MEDLINE, OVID SP EMBASE and CINAHL databases		 19 studies from 6 countries were included in the review
were searched using synonyms of stroke, aerobic exercise (broad	Records identified through database searching (n = 11446) Additional records identified through other sources (n = 3)	 Mainly North American (n=10) &

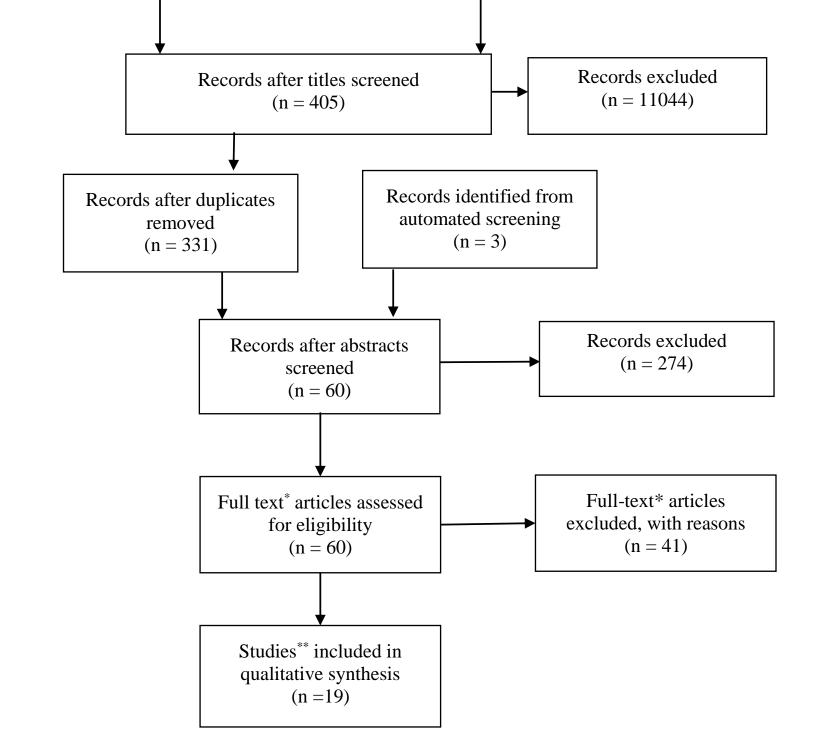
definition) and barriers/facilitators

Titles & abstracts screened by 1 reviewer enhanced by retrospective automated screening using Rayyan software. Full texts screened independently by 3 reviewers.



Data extracted independently by 3 reviewers using domains from the Consolidated Framework for Implementation Research (CFIR) (Damschroder, et al. 2009)

Data synthesised using a framework synthesis approach.



*Includes conference abstracts for which no full texts were available **Compiled of 8 conference abstracts and 11 full text articles physiotherapists' perspectives

- 4 studies explored staff perspectives of implementation of aerobic exercise after stroke
- 15 studies explored perspectives of
 implementation of exercise-related
 interventions after stroke
- Study settings included hospitals, primary practice, leisure services and charities.
- Majority of study participants were healthcare staff (n=15 studies) with exercise professionals in 3 studies.

Staff Characteristics

- Knowledge & confidence about aerobic exercise & stroke
- Concerns about patients' ability & motivation to participate in aerobic exercise

Communication &

- Collaboration
- Between professionals within organisations e,g, to facilitate referrals
- Knowledge-sharing between both professionals and services

Ability to adapt exercise through:

Adaptability

- Equipment
- Changing the environment
- Specialist or additional staff

Factors

perceived by staff to influence implementation of aerobic exercise after stroke

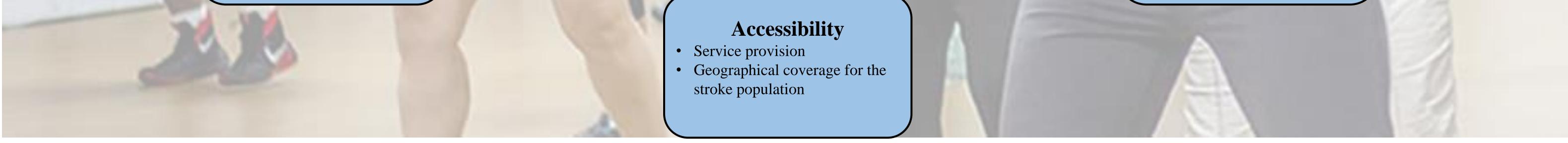
Patient Needs &

Resources

- Physical & cognitive needs
- Comorbidities
- Safety & perceived risks
- Social & cultural factors.

Resources

- Availability of staff, training, equipment, physical space
- Access to screening & exercise testing
- Provision of funding for training



Conclusion

- > Factors were identified across most CFIR domains including intervention characteristics, the individuals (patients and staff) and the service.
- Further research should explore which of these factors are modifiable and which to target to facilitate implementation of aerobic exercise after stroke in practice.

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This work was supported by a Grant from the Chartered Society of Physiotherapy Charitable Trust (Grant number PRF/17/B01).