

Stroke Survivor and Physical Therapist Perceptions of Community-Based Exercise in Northwest Oregon: A Qualitative Pilot Study

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Background

Upon discharge from formal rehabilitation programs, individuals with chronic stroke are often constrained by physical limitations, leading to a diminished quality of life, participation restrictions, and an increased risk of further disability.¹ (Rose et al, 2013) Community-based exercise (CBE) programs specific to individuals post-stroke may offer a mechanism to ameliorate these sequelae.²(Pang et al, 2005) Current evidence supports the efficacy of CBEs in improving health-related outcomes, quality of life, and social participation post-stroke.³ (Lau et al, 2016)

The aim of this region-specific study is to explore current physical therapy practice in educating and preparing stroke survivors for CBE, from the perspective of stroke clinicians and stroke survivors.

Methods

Inclusion criteria for stroke survivors:

- >3 mo post onset of stroke
- community dwelling resident of Oregon

Inclusion criteria for physical therapists:

- Experience with stroke rehabilitation
- >1 year practicing licensed in OR or WA

Data collection:

- Individual semi-structured interviews conducted by primary interviewer with additional note taker present

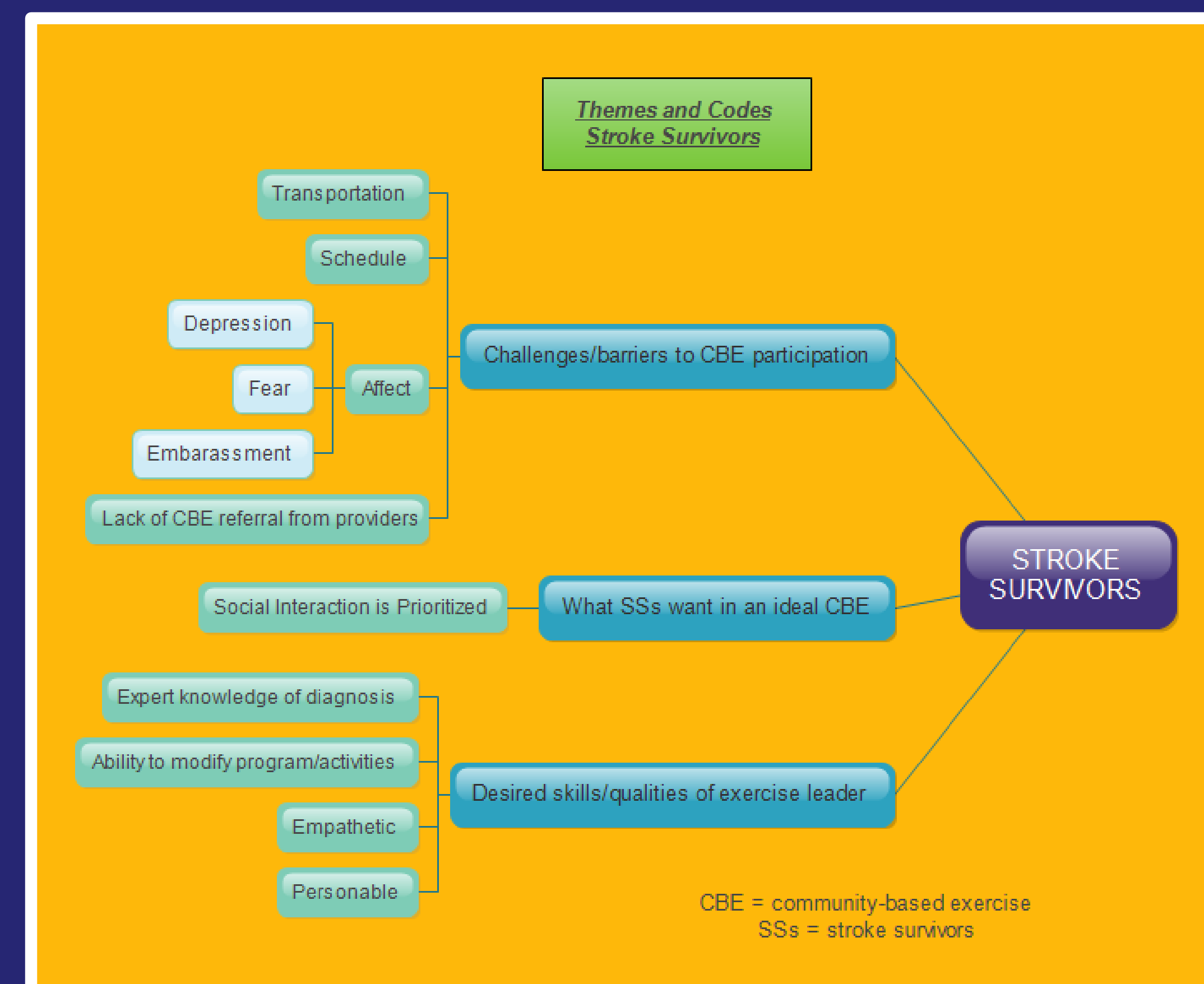
Data Analysis:

- Stepwise qualitative content analysis⁴ (Granneheim, 2004) of interview notes to identify common themes and codes (ie. ≥ 2 participant agreement per group)

SSs = stroke survivors
PTs = physical therapists
CBEs = community-based exercise programs

Results

CHARACTERISTICS OF STUDY PARTICIPANTS	
Stroke Survivors (SS) N=4	
Age in years: mean (range)	64 (59-73)
Years Post-stroke: mean (range)	3.6 (1.43-7.89)
Male (%)	75
% SS with new use of assistive device for post-stroke	50%
Pre to Post-stroke % decrease in	
community ambulation frequency (days/week)	35%
% SS with reported functional limitations	50%
Physical Therapists (PT) N=5	
Female	80%
Years of PT Experience	13 (2.5-27)
Average number of SS treated daily	2 (1-4)
Frequency of CBE education delivery	35%



"You sit at home and feel sorry for yourself, but I haven't seen a support group to be able to talk with stroke survivors....we're pretty isolated from one another."
- Stroke survivor



There needs to be more awareness on what's available. So there needs to be more community collaboration specific to the stroke community. And access and utilization needs to be pushed harder in the community.
- Physical Therapist



Discussion

Interview data from this study agrees with *Lau et al, 2015*, in that PTs that work regularly with SSs tend to promote CBE involvement, but that there is little to no streamlined or coordinated process for their promotion.

There is either a complete lack of stroke-specific CBE programs in Northwest Oregon, or they are so poorly promoted that no one in this study was aware of any.

Both PTs and SSs most commonly cited transportation and the lack of stroke-specific CBEs as the most common barriers to SSs participating in CBEs.

SSs agreed that the social support component of SSs working side-by-side in a CBE would be of great support, both as a motivator to "show up" and improve health and fitness together, but also as a psychological bolster. This is in agreement with *Van Vliet et al, 2015*.

SSs largely agreed that non-stroke-specific CBEs were intimidating, alienating, or both. Interview data was inconclusive in highlighting SS characteristics that influence the provision of CBE education.

Data suggests that SSs equate readiness to engage in CBEs as motivation and a lack of physical barriers to participation (transportation, cost, etc).

PTs perceive readiness to engage in CBEs in terms of patient safety, patient affect/motivation, and severity of residual physical deficits post-stroke.

There was no consensus among SSs for preference of the delivery method for CBE information, though PTs largely agreed that there needs to be consistency in the referral process, there needs to be a variety of materials to use to refer patients to CBEs based on differing learning styles and abilities, and that the materials needed to be concise.

There was no consensus regarding optimal methods to empower individuals post-stroke to pursue CBE options.

Conclusion and Future Directions

Due to a lack of stroke-specific CBEs in Northwest Oregon, physical therapists in the region who frequently work with SSs need to come together in promotion of such CBEs. Such programs can make all the difference in empowering SSs, encouraging reintegration into the community and improving participation, and enhancing overall quality of life (*Van Vliet et al, 2015*).

Future research should explore stroke-specific CBEs. Such programs may help create a supportive social community in the context of movement, providing not only the benefits of social connection, but also physical benefits such as falls prevention, improved balance, increased strength, and promotion of cardiovascular endurance in those recovering from stroke.

The process of educating SSs about CBE programs post-stroke needs to be streamlined, and each physical therapist needs a frequently updated and routinely organized set of materials that address CBE promotion. These materials need to be varied in format, as some SSs prefer brochures or handouts while others prefer electronic media.

References

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