



The Perceptions of People with Stroke on the Impact of Valuable Patient Education in the Acute Phase of Recovery

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Introduction

- Roughly 795,000-800,000 strokes occur every year in the United States alone, making it the fifth most common cause of mortality and a leading cause of serious disability (Gutierrez & Esenwa, 2015; Tsao et al., 20122).
- The practice of providing education to stroke patients and their families is vital because it helps combat the medical implications that results from stroke and is among the primary strategies targeted at reducing recurrent episodes and new cases (Maniva et al., 2018).
- Despite evidence regarding the benefits attributed to post-stroke patient education, the incidence of stroke is increasingly and alarmingly high.
- The purpose of this research project was to explore post-stroke patients' perceptions of information that was most valuable to receive during the acute phase of recovery, information that was overlooked, but needed, and implications of this information on their health and recovery.
- This research project was conducted in collaboration with UAB's Spain Rehabilitation Center (SRC).

Methods

- This qualitative study utilized in-depth interviews with individuals with stroke regarding their experiences in acute rehabilitation and their perceptions of post-stroke patient education.
- Interviews were ~25-30 minutes long and examined participants' perceptions of the most valuable information received, information not received but needed, and what they would change about the education procedure that was delivered in the acute phase.
- Participants had to be 18 years or older, had experienced one or more strokes at least 6 months prior to enrolling in the study, had no expressive or comprehensive difficulties, and received inpatient rehabilitation.
- Participants were recruited through databases of subjects who participated in previous studies conducted by the faculty mentor of this project, referrals from occupational therapists and case managers of UAB's SRC, and stroke support/community groups.
- If eligible, participants were screened via phone call and interviewed via HIPAA compliant Zoom that was recorded and transcribed verbatim to be analyzed using thematic analysis.
- A sample of 6 participants were interviewed and included in the study.

Results

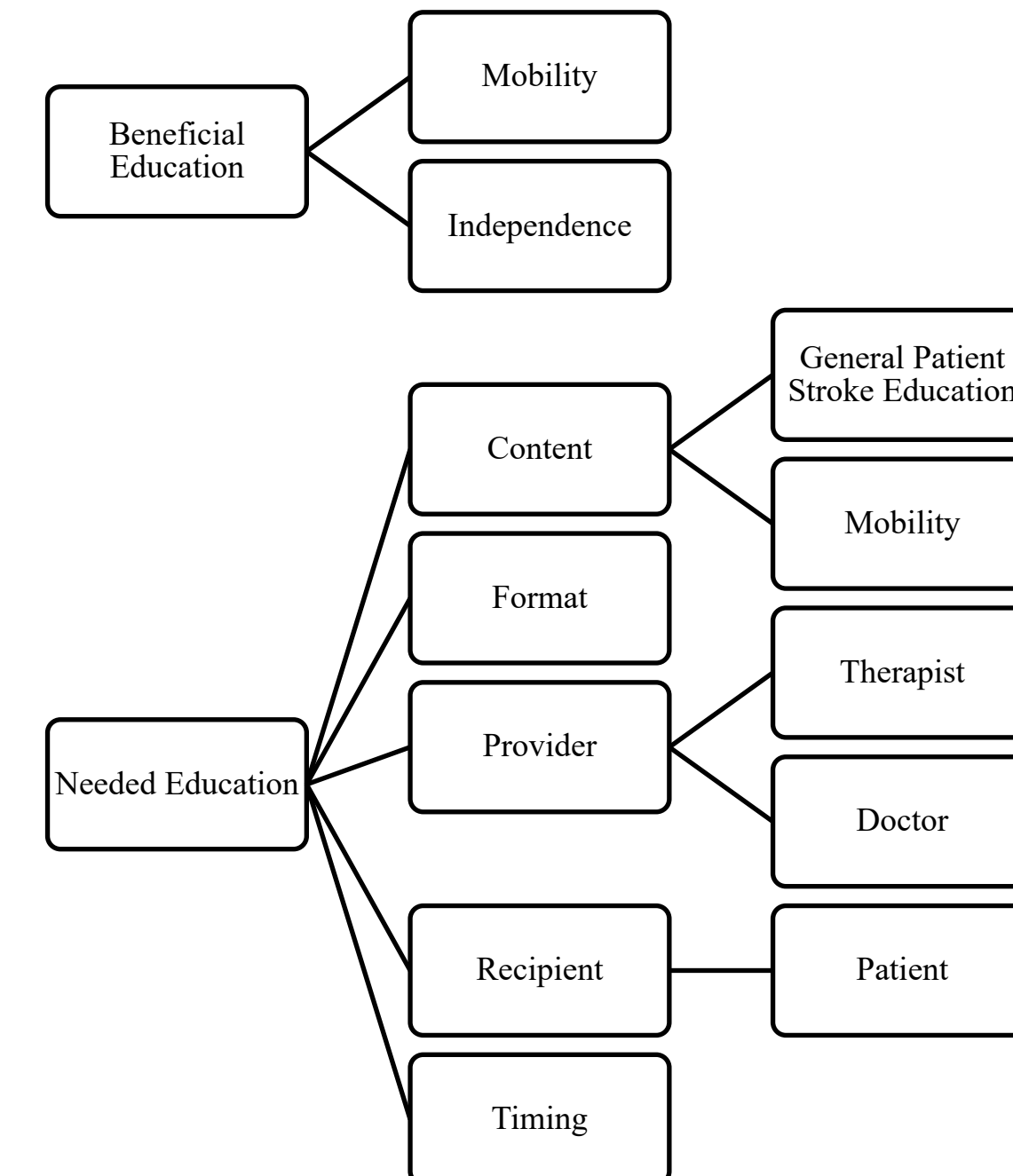
Table 1: Demographic Characteristics of Participants

Sample Characteristics	n	%	Mean (range)
Gender			
Male / Female	4 / 2	67 / 33	-
Age (years)	-	-	56 (49-66)
Stroke Type			
Ischemic	2	33	-
Hemorrhagic	4	67	-
Affected Side			
Right / Left	3 / 3	50 / 50	-
Time Since Stroke (years)	-	-	8.7 (3-23)
Received Acute Care			
In-State / Out-of-State	4 / 2	67 / 33	-
Services in Acute Care			
OT	4	67	-
PT	4	67	-
ST	4	67	-
Other	2	33	-
Received Inpatient Care			
In-State / Out-of-State	4 / 2	67 / 33	-
Current Difficulty with ADLs	5	83	-

- Note. N = 6. Percentages are rounded to the nearest whole number. OT = Occupational Therapy, PT = Physical Therapy, ST = Speech Therapy, ADLs = Activities of Daily Living.
- Figure 1 represents the two primary, seven secondary, and five tertiary codes that were identified from interview responses.

Results continued

Figure 1: Thematic Analysis



Beneficial Education

- 16% most valued education regarding mobility (e.g., walking maneuvering, transfers)
- 33% most valued education regarding independence (e.g., activities of daily living, maneuvering a wheelchair, walking, performing any meaningful activity without assistance)
- ~4 participants had difficulty identifying beneficial education because of not receiving it themselves in acute care due to severity of stroke, time spent in ICU, and/or family members receiving it instead

Needed Education

- 83% had unmet needs with the content of education
 - needed more content regarding general patient stroke education (e.g., education given to the patient about their type of stroke, treatment, prevention, progression, and recovery) and mobility
- 67% had unmet needs with the format (e.g., print, verbal, hands-on, technology/media)
 - some preferred more hands-on education, others preferred more verbal education through the use of peer support groups, and one preferred more technology-based education
- 50% had unmet needs with the preferred provider of education
 - common responses for preferred providers were therapist (e.g., occupational, physical, and/or speech) and doctor
- 33% had unmet needs with the receiver of education (e.g., patient or family member)
 - participants expressed that not receiving the education themselves led to feeling "scared" and "confused"
- 33% had unmet needs with the preferred timing of educational delivery
 - participants reported needing to receive education at a different time or more time to receive/understand it

Discussion

- Results of this study are supported by existing literature demonstrating the need for improvement in the practice of implementing post-stroke education.
- Perceptions of education that would have been valuable to receive varied based on priorities, the severity and ramifications of the stroke, and perceived needs during acute care.
- Variations in format preferences emphasize the importance of providers tailoring education procedures to meet the learning needs of the patient.
- Results revealed preferences for continuous education initiated by providers, such as a therapist due to spending more time with therapists during sessions, which led to feeling more comfortable and being able to ask more questions.

Discussion continued

- Stroke survivors in the acute phase of recovery often feel overwhelmed following a stroke, and understanding education can be challenging or even impossible, resulting in the belief or feeling that they did not receive it at all.
- While it is vital to still include patients in the education process to prevent feelings of fear and dismissal, including caregivers and family members is important to ensure information retention and avert the feeling of not receiving enough.
- This study provides occupational therapists and other healthcare providers insight to the gaps that exist between healthcare professionals' understanding of effective post-stroke education versus their actual implementation of the education and alternatively more effective strategies to deliver education.
- Results of this study yield substantial implications for tailoring education to develop higher-quality post-stroke patient education that better promotes health management and recovery.

Conclusion

- Education is not a one-size-fits-all. Needs and priorities vary from person to person and over time.
- Comprehensive post-stroke education should be tailored to include:
 - patient concerns and knowledge during each encounter
 - preferences in learning style and health literacy to meet learning needs and ensure increased understanding
 - patient's and/or family's mental and emotional status to determine appropriate time for educational delivery
 - reiterations of information and inclusion of family/caregivers throughout recovery to optimize retention

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Acknowledgement & Contact information

A special thank you to my faculty mentor, Sarah dos Anjos, PhD, OTS, MSc, OTR/L for her time, knowledge, and guidance throughout this project. Thank you to my site mentor, Randie Carter, OTR/L, CCM for welcoming me with open arms, her support, and encouragement. Thank you to UAB's Spain Rehabilitation for making this research project possible.

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