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Exploration of Factors Influencing Functional Capacity of Stroke Survivors

Abstract

A stroke is a life changing event for stroke victims and their caregivers. Family members must care for stroke victims at home after they receive emergency care in the hospital. The prognosis of a stroke patient depends on many factors.

Objectives: This study aimed to explore the factors influencing the functional capacity of stroke survivors as perceived by relevant stake holders.

Methods: Research design was an exploratory qualitative study using a grounded theory approach. The sample was chosen by purposive sampling. The study participants were drawn from relevant stakeholders namely the stroke survivors, primary caregivers, health care professionals, community health team members, and the general population. Theoretical sampling was followed in the selection of subjects. Data collection was done through in-depth interviews and Focus group Discussions. To ensure the quality of collected data, 1–2 in-depth interviews were conducted per day, depending on the availability of participants. Transcription of data, data coding and analysis were done simultaneously with data collection. Thematic analysis was performed using the hybrid coding approach. Direct codes were used to highlight the themes identified.

Results: Qualitative analysis shows that the following factors were influencing the functional capacity of stroke survivors; 1. socio-personal factors 2. Household level factors 3. Disease-related factors 4. Emotional Factors 5. Societal Factors and 6. Rehabilitation.

Conclusion: The findings give the motivation to prepare community intervention programs to minimize caregivers' burden and facilitate good health and well-being of both stroke survivors and their caregivers.

(Key words- Exploration; Factors; functional capacity; stroke survivor; care giver)

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Introduction

Stroke has been defined by WHO as the rapid onset of focal neurological deficit lasting more than 24 hours with no apparent cause other than disruption of blood supply to the brain. It is the leading cause of physical disability. Disabilities resulting from stroke place heavy social, psychological, and financial demands both on the patients and the caregiver as well¹. Stroke is a complex disease and its management requires the efforts and skills of all members of the multidisciplinary team. The efficacy of stroke therapy depends on early intervention and well-coordinated emergency care. Nurses are often responsible for the coordination of care throughout the continuum. They play an important role in the early assessment and initiation of stroke care, management, rehabilitation, and education².

Early rehabilitation allows stroke patients to recover more quickly and perhaps to a higher level of function. Patients should be trained to maximize their function based on their current abilities³.

Stroke incidence and mortality rates are increasing along with modernization and advancing longevity. Worldwide 15 million people suffer from stroke each year. Two-third of all stroke deaths and 60% of all strokes occur in low and middle-income countries. Men have a slightly higher incidence of stroke than women, but women have higher mortality rates. There is a high incidence of hemorrhagic stroke in Asian people. Strokes occur at any age but are more common in the elderly⁴.

Aim

Explore the factors influencing the functional capacity of stroke survivors.

The objective of the study

- ★ To explore the factors influencing the functional capacity of stroke survivors as perceived by relevant stakeholders.

Definition of concepts

- ★ Stroke survivors - Patients up to the age of 65 years with a confirmatory diagnosis of stroke.
- ★ Functional capacity - It refers to the capability of performing tasks and activities that people find necessary or desirable in their lives.

- ★ Factors – Direct and indirect stimuli that influence the wellbeing of stroke survivors.

2. Materials & Methods

The research approach used was qualitative methodology.

Research design

Exploratory qualitative study using general inductive approach Setting

- ★ PMR department, Government Medical College, Thiruvananthapuram
- ★ Selected villages in Thiruvananthapuram District.

Participants

The study participants are drawn from relevant stake holders namely the stroke survivors, primary caregivers, health care professionals, community health team members, and community health workers from the selected community.

Inclusion criteria

1. Stroke patients who are stable and below 65 years of age
2. Primary Caregiver of the patient with a confirmed diagnosis of stroke
3. Healthcare professionals involved in stroke rehabilitation
4. Community rehabilitation team members

Exclusion Criteria

Sample size & Sampling procedure

Theoretical sampling was followed in the selection of subjects. The initial sample of 3-5 participants from each category, most likely to provide rich information about the experiences of the phenomena under study, was purposively drawn. The interviews were coded and based on the insights and themes generated. Additional samples were drawn using purposive sampling. Sample size depends upon data saturation.

Data collection

Data collection methods include In-depth interviews (IDIs) and Focus Group Discussions (FGDs).

- ★ Categories of stake holders for IDIs - stroke survivors, primary caregivers and health care professionals.
- ★ Categories of stake holders for FGDs - community health team members and community health workers

Study instruments

Interview schedules with open ended questions were used for collecting data through IDIs. Separate schedules used for different categories of stakeholders. Open ended questions helped to express their feelings and barriers of health promotion.

Part A - Socio demographic data of participants.

It includes;

- ★ Age
- ★ Gender
- ★ Domicile
- ★ Duration of stroke
- ★ Presence of co-morbidities
- ★ Relationship with the primary caregiver
- ★ Activities of daily living (ADL) status of stroke survivor:
- ★ Duration of hospital stay during stroke onset
- ★ Initial treatment received for stroke

Part B - Structured open-ended questions to explore the factors influencing the functional capacity of stroke survivors. The main concepts were;

1. Likes and dislikes in caring for stroke patients in hospital
2. The most challenging aspect of stroke rehabilitation
3. Factors influencing functional well-being of stroke survivors
4. Achieving maximum functional ability of stroke survivor
5. Role of the family caregiver in the well-being of stroke survivor
6. Changes that you would like to make in the stroke survivor
7. Resources and financial support available for stroke rehabilitation
8. Possibility of physical activities after stroke recovery
9. A patient's potential to benefit from rehabilitation
10. Prognosis you identify within a stroke survivor
11. Rate your ability to handle the situation on a 1-10 scale

To ensure the quality of collected data, 1–2 in-depth interviews were conducted per day, depending on the availability of participants.

Focus Group Discussion.

- ★ Participants with the range of 6-10 per discussion
- ★ Selected by purposive sampling
- ★ Participants from different background
- ★ Encouraged interaction among participants
- ★ FRAMES (Future-oriented, resource activating, Miracle, Exceptions, and Scaling questions) questions were used to generate ideas

Data collection technique

Data were collected through face-to-face interviews and discussions after getting informed consent from the participants. All interviews and FGDs were done by the researcher and recorded using a digital voice recorder to ensure that the interview content was accurately captured, with prior permission from participants.

Data analysis

Transcription of data, data coding, and analysis were simultaneously done with data collection. Thematic analysis was performed using a hybrid coding approach. Direct codes are used wherever necessary to highlight the themes identified.

3. Results

Based on the objective the findings were categorized under six major themes

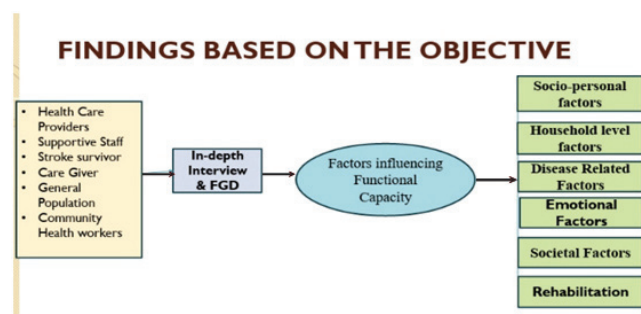


Table:1 Sub themes of Factors influencing Functional capacity of Stroke Survivors

Sl. No	FACTORS	SUBTHEME
1	Socio-personal factors	1. Age & Gender 2. Life style behavior 3. Socio economic status 4. Bread winner of the family(Stroke survivor/caregiver) 5. Substitute job/Source of income

2	Household level factors	1. Presence of care giver 2. Care giver characteristics (Age, occupation, Health status, Relationship with stroke survivor) 3. Home care education/Stroke specific knowledge 4. Care by caregiver /Willingness and interest/Ignorance 5. Home environment
3	Disease Related Factors	1. Area of brain damage 2. Type of stroke, Severity of illness & Presence of comorbidity 3. Duration of hospital stay 4. Time of initial treatment, Type of treatment & tolerance 5. Prognosis & Complications
4	Emotional Factors	1. Motivation 2. Mood 3. Ability to stick with rehabilitation 4. Inherent insight 5. Acceptance 6. Psychological stability/depression 7. Understanding ability
5	Societal Factors	1. Physical Accessibility issues (Distance of health services, Transport facilities) 2. Ramp safety in public 3. Support groups for survivors and caregivers 4. Societal participation/encouragement 5. Availability of Counseling services 6. Community team visits & awareness programs
6	Rehabilitation	1. Exercise 2. Therapies 3. Assistive devices 4. Follow-up treatment & Continuity of care 5. Prevention of complications

4. DISCUSSION

The present study was aimed to explore the factors influencing the functional capacity of stroke survivors as perceived by relevant stakeholders. In-depth interviews and Focus Group discussions were used as data collection techniques. The result of the study was identified under six themes namely socio-personal factors, household level factors, diseases related factors, Emotional factors, Societal Factors and Rehabilitation. The findings were supported by a study conducted by Josefa Santos et.al (2020) to determine the factors that are the greatest determinants of functional capacity and quality of life a month after suffering a stroke. The sample consisted of 81 people who had previously suffered a stroke. The study population was recruited at

the time of discharge from the Neurology Service and Stroke Unit through consecutive sampling. Data were collected one month after participants experienced a stroke, and the main study variables were quality of life and functional independence. Result shows the type of dwelling, age, cognitive ability and functional capacity of the affected upper limb are the determining aspects in functional independence among stroke survivors.

Conclusion

The findings of the present study is a motivation to prepare a community intervention program to minimize caregiver burden and facilitate good health and well-being of both stroke survivors and their caregivers.

Ethics approval: Ethics Committee of Government Medical College, Thiruvananthapuram, Approved this study. All participants gave written informed consent before the data collection began.

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Conflict of Interest: The author declares no conflict of interest.

Reference

1. Rodgers H. *Stroke. Handbook of Clinical Neurology* 2013;110:427–433
2. Sukhpal Kaur, Manjeet Singh, *Clinical Neurosciences and Critical Care Nursing. Jsypee Brothers* 2014. Pp 319-320
3. Douglas J Gels, *Introduction to Clinical Neurology. Elsevier* 2009. Pp 120
4. Isaac E Silverman, Marilyn M Rymer, *An Atlas of Investigation and treatment of Ischemic Stroke. Atlas Medical Publishing.* 2009, Pp 1-2
5. Josefa Santos et.al. *Int. J. Environ. Res. Public Health* 2023, 20(2), 995;