Development and Validation of the PACE Intervention for Home Care Training of Ischemic Stroke Caregivers: A Developmental Research Study

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Abstract

Background: Caregivers of ischemic stroke survivors play a key role in patient recovery, yet they often lack structured training to provide effective home care.

Aim: The aim of this study was to develop and validate the Personal hygiene, Ambulatory care, Communication and support system, and Elimination and feeding care (PACE) intervention for training caregivers of ischemic stroke survivors.

Methods: This research was conducted in three phases. In the first phase, a checklist was developed and administered to caregivers of ischemic stroke survivors to identify their needs. The identified needs were grouped into five categories, collectively termed PACE: Personal hygiene care, ambulatory care, communication and support system care, and elimination and feeding care. In the second phase, the PACE intervention was developed. In the third phase, the draft intervention and checklist were reviewed by five experts from neurology, palliative medicine, rehabilitation, and clinical nursing to assess content validity and reliability. After validation, the module was translated into Hindi to enhance accessibility, and a language expert assessed its readability.

Results: The needs assessment identified ambulation (80%), oral hygiene (74%), communication (70%), catheter and bathing care (66%), elimination care (64%), and feeding care (58%) as the major caregiver needs. Expert validation demonstrated excellent content validity (scale content validity index = 0.94), item-level content validity index values ≥ 0.78, and high internal consistency (Cronbach's $\alpha > 0.79$).

Discussion: The PACE intervention demonstrated excellent content validity and provides a structured, evidence-based approach for caregiver training.

Conclusion: The PACE intervention is a validated, structured home care training program that equips caregivers with essential skills for managing ischemic stroke survivors.

Keywords: Delphi method, developmental research, home-based rehabilitation, ischemic stroke care, PACE intervention