Occupational therapy interventions in community stroke rehabilitation: Can we do better?

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Research problem

- No evidence of whether community stroke rehabilitation teams (CSR) services meet rehabilitation goals
- Evidence of inequities in service provision

Knowledge gap

- How can CSR teams determine if they meet rehabilitation goals?
- What facilitates or prevents high-quality CSR?

Research aims and questions

Aim: use a recognised taxonomy to code intervention targets to identify

- a) if there were gaps in interventions provided by three regional CSR teams in Auckland NZ and
- b) the facilitators and barriers that impacted on service provision

Questions:

1. What were the type and frequency of CSR interventions?
2. From the CSR staff viewpoint, what were the reasons for the high, low or missing interventions?

Methodology

Design: sequential quantitative to qualitative design

Data collection

- Study 1: Used 113 patient files who had received CSR from 3 Auckland CSR services from March 2016 to February 2017.
- Intervention targets and frequency were extracted and coded to the Extended International Classification for Functioning Disability and Health core set for stroke (EICSS), (Starrost et al.,2008), using linking rules (Ceiza et al.,2005).
- Study 2: 15 individual interviews from OTs, PTs and STs employed in the 3 CSR services discussing the reasons for intervention patterns for their CRS

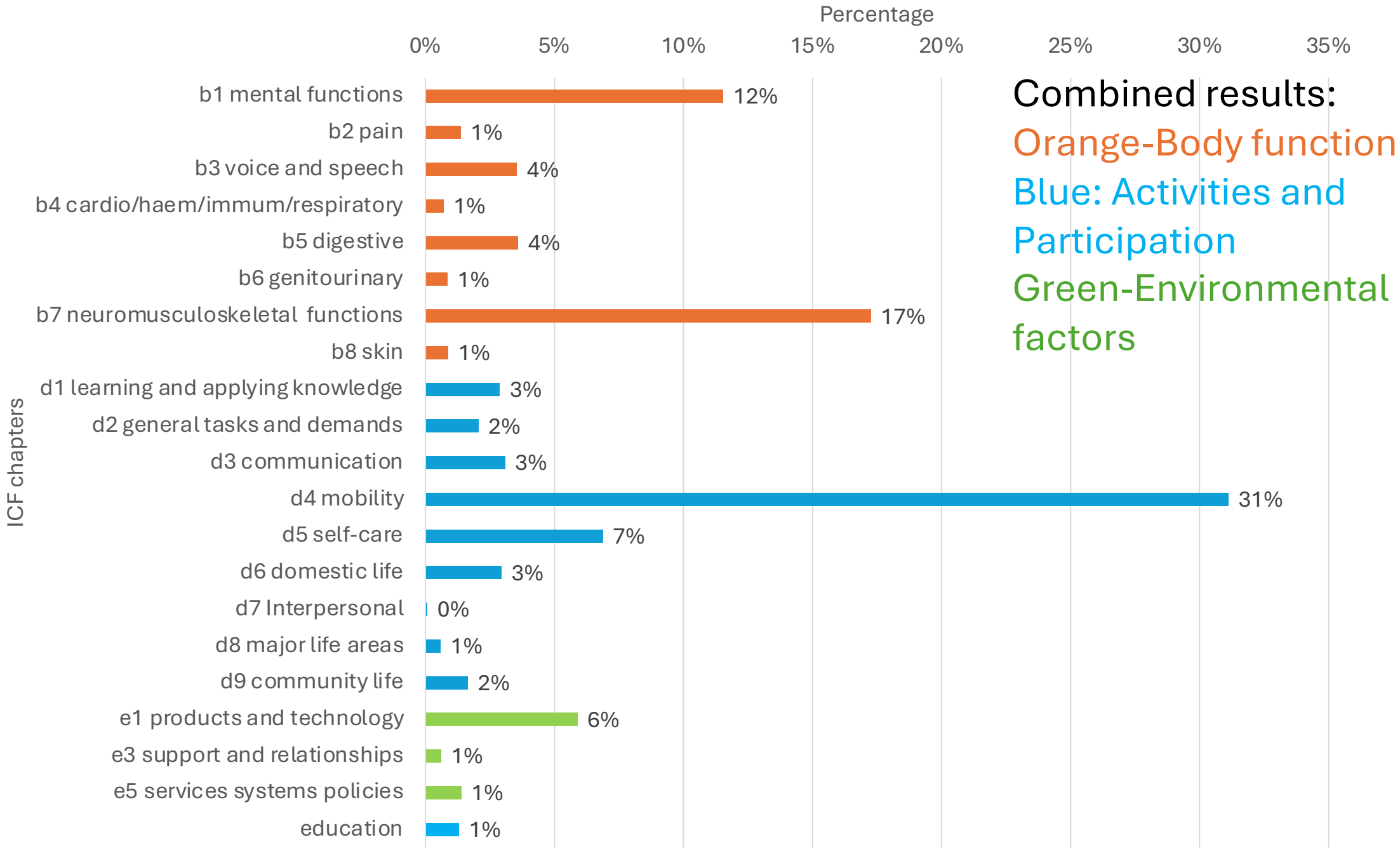
Analysis

Quantitative: descriptive statistics

- EICSS functional categories not present in the data were considered missing interventions
- To determine their importance, missing interventions were compared to the Stroke Foundation of NZ clinical guidelines (SFNZCG),(2010)

Qualitative: Thematic analysis

Two studies were integrated by looking for agreement or disagreement


Percentage
0%
5%
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ICF chapters
b1 mental functions 12%
b2 pain 1%
b3 voice and speech 4%
b4 cardio/haem/immum/respiratory 1%
b5 digestive 4%
b6 genitourinary 1%
b7 neuromusculoskeletal functions 17%
b8 skin 1%
d1 learning and applying knowledge 3%
d2 general tasks and demands 2%
d3 communication 3%
d4 mobility 31%
d5 self-care 7%
d6 domestic life 3%
d7 Interpersonal 0%
d8 major life areas 1%
d9 community life 2%
e1 products and technology 6%
e3 support and relationships 1%
e5 services systems policies 1%
education 1%
Combined results:
Orange-Body function
Blue: Activities and Participation
Green-Environmental factors

Comparison to the SFNZCG (2010) found these interventions were missing

Body function

- Perception
- Sequencing movement
- Temperament and personality
- Sexuality
- Joint stability

Activities and participation

- Focusing attention
- Receiving non-verbal messages
- Paid employment

Environmental factors

- Individual attitudes of the family
- Architecture and construction
- Employment systems

High Interventions	Therapists view
Physical impairment (17%) mobility (31%)	Driven by patient goals and physical impairment being common, PT, OT, and TA input, higher-intensity interventions in services, with ESD or group exercise sessions. Intervention is easy to provide
Fatigue (3%) energy and drive under b1 mental functions	All staff provide fatigue management –fatigue a barrier to rehabilitation.
Looking after one's health (3.7% (under d5 self care)	Health advice given to the family and patient to maintain health

Low Interventions	Therapist view
Emotional functions (0.7%) managing stress (1.7%)	Low number of psychology staff. Other staff asked to take on this role (SW)
Shopping (0.3%), leisure 0.5%, transport (0.2%), community life (1.0%) & work (0.3%)	Lack of time and difficult to organise. Shifting role to the other organisations outside the CSR service
Driving (0.3%)	Not provided by the CSR
Work (0.3%)	Most patients over 65 yrs
Sensation (0.2%), vision (0.6%), proprioception (0%), apraxia (0%)	Lack of knowledge, and not assessed routinely
higher cognitive functions (0.9%)	Not able to delegate to therapy aides
Sexuality (%)	Therapist discomfort and lack of training

Conclusion and recommendations

Using the EICSS (Dorjbal et al., 2026) it's possible to measure and record intervention targets will enable analysis of service provision

Recommendations for CRS services involved in this research:

a) Increase group fitness classes and ESD services to provide a higher intensity of physical rehabilitation
b) Employ more psychology staff
c) Provide training to therapists and therapy aids on sensation, vision, higher cognition, apraxia and sexuality interventions
d) Introduce self-management programmes to improve community participation
e) Increase services to address driving and return to work

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