Home settings and post stroke - development of a methodology of investigation

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State of art

✓ Care chain from hospital to patients’ home

✓ Early support discharge can contribute to patients health and well-being

✓ Evidence-based architecture in the field of rehabilitation is lacking - what about the physical environment?
Aim

Increase knowledge about the interaction between the physical environment of home settings and stroke survivors experience of it

How?
Through the development of a transdisciplinary methodology that acknowledge the centrality of the individual with stroke
Why is this important?

Experiences
Behavior
Well-being
Systematic review

Post stroke

✓ Individuals after stroke episode(s)

Home

✓ Setting of investigation

Physical environment

✓ Architectural, interior design and ambient features (Harris, 2002)
✓ Facilitators and barriers (ICF) (WHO, 2015)
Records from database searching (N = 7293)
  CINAHL (1572)
  Medline (4049)
  Web of Science (1630)
  Scopus (42)

Identification

Additional records (N = 4)

Records screened by subject areas, English, peer-reviewed, time span and duplicates (N = 7297)

Screening

Records excluded (N = 6890)

Records screened title, abstract & keywords (N = 407)

Eligibility

Records excluded (N = 372)

Full-text articles assessed for eligibility (N = 35)

Included

Records excluded (N = 19)

Studies included in the systematic review (N = 15)
Systematic review results

Articles ($N=15$)

Physical environment dimension(s):

- All 3 dimensions of the environment ($N=4$) (25%)
- Architectural & interior design features ($N=11$) (65%)

Physical environment – post stroke focus

- Activity and Mobility ($N=15$)
- Psychological/emotional experience of place ($N=1$)
- Time issue (missing)
Transdisciplinary approach

**Architecture** – focus on the built environment

**Nursing research** – focus on the individual rehabilitation processes

**Medicine** – focus on the individual medical condition & rehabilitation

**Environmental psychology (EP)** – focus on the interplay between people and the environment and investigates the underlying psychosocial processes that intercede between each human-environment interaction.
Merging together the different disciplines

HEI model (Küller, 1991)
Methodology

Mix method
Multi-perspective

Physical environment
Perceived quality of
Home & neighborhood (facilitators vs barriers)

Social environment
Social support (family and social services)

Activity
Daily life activity link to the environment

Individual resources
Medical condition (mild stroke) background info

Well-being outcomes
Rehabilitation and health

Place attachment
Self-efficacy

Interview & observation
Patients, nurses, family

1 and 6 months after stroke
Behavioral mapping
How far have we got?

**Testing the methodology**
- 1st month after stroke data collection
- Sample = People with mild stroke conditions (N = 15)
- Setting = home (Malmö, Sweden)

**Next step**
- 6 months after stroke data collection
- Same sample
- Data coding and analysis
- Discussion of results (facilitators vs barriers)
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