

“I Feel a Lot More Vulnerable”: Exploring Unmet Psychosocial Care and Recovery Needs in Young Survivors of Stroke

Syeda Hashmi, MD
Department of Psychiatry
University Health Network
Toronto, Canada

Presentation Roadmap



Introduction & Rationale



Methods (Qualitative Focus)



Findings (Key Themes & Illustrative Quotes)



Discussion & Implications



Conclusion, Limitations & Future Directions

Introduction

- Stroke incidence in <65 y/o adults has doubled over the past decade (Feigin et al., 2021)
- Younger survivors often experience disproportionately high psychosocial challenges compared to physical deficits
- Traditional stroke care is primarily designed for older populations



Relevance & Rationale

- Underexplored psychosocial impacts: identity disruption, stigma, role conflict
- Younger adults juggle career, education, or parenting responsibilities
- Standard tools (e.g., Neuro-QOL) may miss nuanced psychosocial complexities (Cella et al., 2012)
- Need for age-specific approaches and integrated care models

Existing Literature Gaps

- Primarily biomedical focus on physical/cognitive recovery (Holloway et al., 2022)
- Limited qualitative research addressing life-stage-specific psychosocial experiences (Amoah et al., 2023)
- Inconsistent stroke care for younger adults: minimal mental health screening, few guidelines on vocational rehabilitation

Study Objectives

1

Explore unmet psychosocial needs of y-stroke survivors (≤ 65 years old)

2

Identify barriers/gaps in stroke care pathways, especially during transitions

3

Inform policy & practice by suggesting tailored interventions for younger adults

Conceptual & Theoretical Lens

- **Critical Realism:**

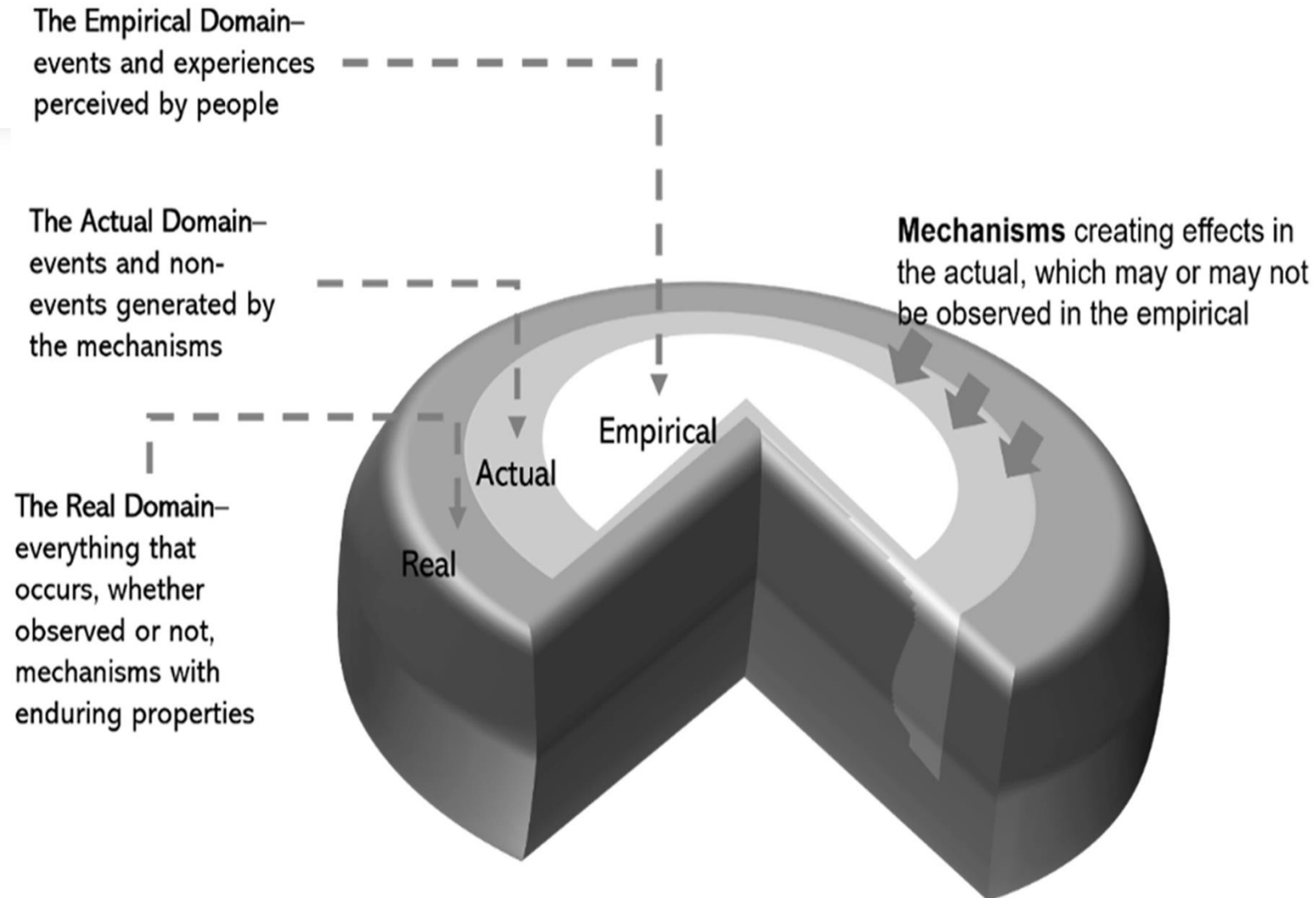
- Recognizes objective reality (stroke pathology) + subjective experiences (Zachariadis et al., 2013)

- **Reflexive Qualitative Approach:**

- Iterative coding, sensitivity to researcher bias

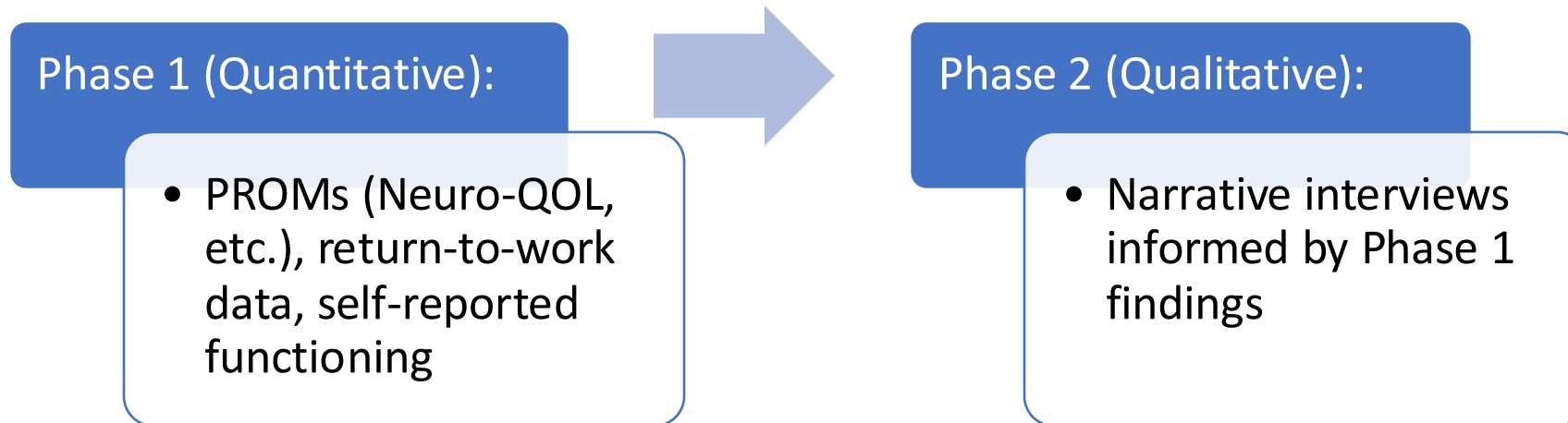
- **Intersectionality:**

- Considers age, gender, language, socio-cultural background



Methods: Study Design

- Sequential Explanatory Mixed-Methods (Y-Stroke Needs, YSN Study)



Methods: Participants & Setting

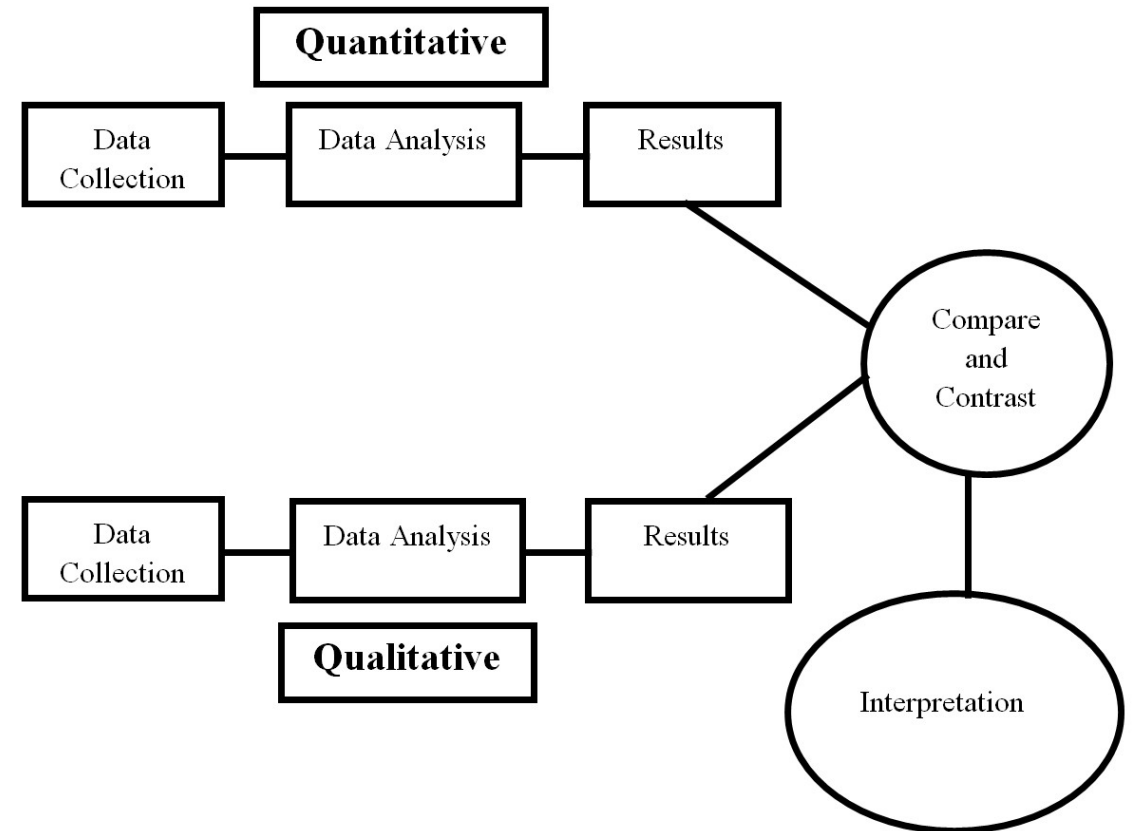
- Inclusion: Adults <65, ≥90 days post-ischemic or hemorrhagic stroke, mild-to-moderate deficits, English proficiency
- Exclusion: Severe aphasia, advanced cognitive impairment, subarachnoid hemorrhage or trauma-related stroke
- Sample: 22 participants (88.2% first-time stroke) from Toronto Western Hospital's Stroke Prevention/Rehab Clinics
- Reasoning: Focus on a relatively homogeneous group (mild–moderate impairment) to capture psychosocial nuances

Methods: Data Collection

- Narrative Interviews: ~1.5 years post-stroke to capture longer-term psychosocial transitions
- Semi-Structured Topics: Identity, emotional/mental health, role transitions, rehab experiences
- Audio-recorded & Transcribed Verbatim: Additional follow-ups for clarification as needed

Methods: Analysis

- Reflexive Thematic Analysis (Clarke et al., 2015)
 - Inductive coding → categories → overarching themes
- Triangulation:
 - Cross-check with quantitative data (Phase 1)
 - Multidisciplinary team (psychiatry, neurology, nursing, social sciences)
- Software: NVivo 12



Reflexivity & Ethical Considerations



REFLEXIVITY: REGULAR TEAM
DISCUSSIONS TO ADDRESS RESEARCHER
BIAS, ENSURE INTERPRETIVE RIGOR



CONFIDENTIALITY: DE-IDENTIFICATION,
PARTICIPANT ANONYMITY

Study Participants

Age Range: Early 30s to mid-50s

Majority were first-time stroke survivors

Varied work statuses: Many not returned to work at time of interviews (Ibrahim et al., 2024)

Typically well-resourced, English-speaking → Implications for generalizability

Key Findings

Three Core Domains of unmet psychosocial needs:

Explicit unmet needs (financial, vocational, role transitions)

Negative care experiences (age bias, misdiagnosis, “too well for rehab”)

Self-advocacy (filling gaps in psychosocial support)



Evolving Needs across acute, sub-acute, and chronic phases

Domain 1: Explicit Unmet Needs

- Financial Strain & Vocational Challenges
 - Disability payments often insufficient; hamper social life, returning to school/work
- Role Transitions
 - Identity shift as parent, spouse, student, or breadwinner
 - Desire for stroke-specific peer networks
- Academic or Workplace Accommodations
 - Some participants faced refusals or skepticism from institutions

Domain 1 Example Quotes

- *“...the money [from disability] is so low. You just don’t have enough to do anything besides basics.”*

(ID#015, male, age 41)

- *“I wanted to go back to school, but they wouldn’t accommodate my slower pace.”*

(ID#010, female, age 36)

Domain 2: Negative Care Experiences

- Age-Related Bias
 - Misdiagnosis or delayed recognition: “You’re too young for stroke”
- Too Well for Rehab”
 - Younger survivors sometimes discharged early, rehab not tailored to their potential capacity
- Emotional Consequences
 - Distress, mistrust in healthcare system; feeling dismissed or invalidated

Domain 2 Example Quotes

I tried telling them my right side was numb. They didn't believe me...like I was exaggerating.”
(ID#004, female, age 43)“

They said I looked fine. Meanwhile, I was exhausted, dizzy, anxious.”
(ID#009, female, age 51)

Domain 3: Self-Advocacy

- Independent Resource-Seeking
 - Private counseling, peer forums, reliance on family/friends
- Health Literacy
 - Participants proactively researching stroke, meds, rehab strategies
- Equity Concerns
 - Not all survivors have time, finances, or social capital to self-advocate effectively

Domain 3: Example Quotes

“I joined an online forum to talk with people my age who had strokes...that helped more than official rehab.”

(ID#003, female, age 53)

“My boss was amazing—let me work shorter hours so I could attend therapy sessions.”

(ID#009, female, age 51)

Evolving Needs Across Recovery

Acute (First 48 hrs)

- Symptom recognition, immediate psychosocial crisis, lack of educational resources

Sub-Acute (~90 Days)

- Balancing desire for normalcy with medical advice, navigating new identity
- Some participants reported depressive symptoms yet did not seek care

Chronic (>90 Days)

- Identity redefinition, fear of recurrence, financial/work instability, sustained isolation

"I didn't realize that headaches was one of the symptoms of stroke... I would have gone to the hospital sooner."



Limited awareness of stroke in younger populations

You're anxious.



"But woman to woman, when you have a period... you want to wash at least once a day... it was just that feeling of powerlessness..."

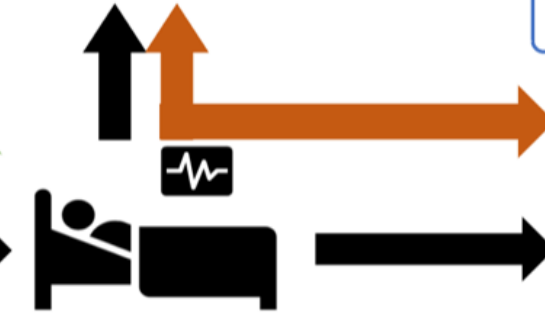


Misidentification of symptoms in acute settings



Errors/omissions in discharge & follow up

"...no follow-up and they only gave me enough blood thinners for seven days, but I needed to continue for two weeks..."



Loss of identity, agency & unclear recovery expectations

One size doesn't fit all.




Age-related mis-matches in rehab opportunities and practices

Context Matters: Age & Life Stages, Gender, Language

Intersectional/Contextual Factors

-
- Age & Life Stage: Career-building, childrearing, relationship transitions
 - Gender Roles: Burden of childcare, household management can differ by gender
 - Language/Cultural Barriers: Communication challenges, unfamiliar healthcare norms
 - Stigma: “Disability” label influencing employability, social acceptance

Discussion: Integrating Findings

- Aligns with research showing psychosocial strain often outlasts physical deficits (Bright et al., 2024)
 - Mismatch between younger survivors' life-stage and standard "geriatric" stroke rehab
 - Necessity for qualitative methods to capture identity disruption, stigma, existential concerns
- 

Significance for Stroke Care

- Holistic Care: Integrate mental health, vocational rehab, peer groups with physical therapy
- Early & Ongoing Psychosocial Screening: Routine checks for anxiety, depression, social isolation
- Life-Stage-Specific Interventions: Parenting resources, flexible rehab programs





Clinical Implications

- Tailored Rehabilitation
 - Age-appropriate intensity, bridging “too well for rehab” gaps
- Integrated Mental Health Services
 - On-site or embedded mental health clinicians to address emotional distress early
- Peer Support & Community Programs
 - Y-stroke-specific social groups, online forums, or local meetups

Policy Implications

- Workplace Accommodations: Legislation or guidelines for flexible hours, role modifications
- Extended Insurance Coverage: Psychosocial therapies, vocational rehab often underfunded
- Public Awareness Campaigns: Challenge “older adult stroke” stereotype; encourage younger people to recognize stroke symptoms



Recommendations for Practice

Multidisciplinary
Teams: Neurology,
psychiatry, nursing,
social work, vocational
rehab

Culturally Sensitive
Approaches:
Interpretation services,
tailored education
materials

Long-Term Follow-Up:
Chronic phase support
to address identity
shifts, fear of
recurrence



MACRO

- Policy/system-level changes such as vocational and financial support programs.
- Advocacy for societal change to support young stroke survivors.

MESO

- Organizational and community-level initiatives, such as peer support networks and integrated care pathways that combine mental and physical health services.

MICRO

- Individual patient care, focusing on patient-centered plans and personalized rehabilitation.

Multilevel Care Recommendations for Young Stroke Survivors.



Limitations

- Sample primarily mild-to-moderate stroke, English-speaking, well-resourced
 - Exclusion of severe aphasia → underrepresents communication barriers
 - Single-center, urban setting (Toronto) → may not reflect rural or more diverse contexts
-



Strengths

- In-depth Narrative Interviews: Rich data on lived experiences
 - Reflexive, Interdisciplinary Team: Minimizes single-researcher bias
 - Temporal Aspect (1.5 years post-stroke): Allows insight into evolving psychosocial challenges
-



Conclusion

- Younger stroke survivors face distinct, evolving psychosocial needs often unmet by current frameworks
- Fragmented care pathways → survivors must self-advocate, leading to inequities
- Integrating mental health, vocational support, and tailored rehab can significantly improve outcomes

Future Directions

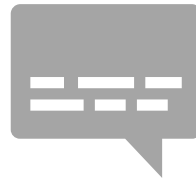
A thick yellow horizontal bar spans the width of the slide, with a vertical yellow bar extending downwards from its right end.

- More Diverse Inclusion: Survivors with aphasia, severe impairments, non-English speakers
- Longitudinal Research: Track psychosocial trajectories 2+ years post-stroke
- Pilot RCTs: Testing integrated psychosocial + physical rehab interventions for y-stroke

Thank You - Q&A



Thank you for listening!



Questions, comments, or
suggestions?



Contact:
Syeda.Hashmi@mail.utoronto.ca

References

- Amoah, D., Prior, S., Mather, C., Schmidt, M., & Bird, M. L. (2023). Exploring the unmet needs of young adults with stroke in Australia: Can technology help meet their needs? A qualitative study. *International Journal of Environmental Research and Public Health*, 20(15), 6450. <https://doi.org/10.3390/ijerph20156450>
- Anderson, C., & Kirkpatrick, S. (2016). Narrative interviewing.
- Berkhout, S. G., Hashmi, S., & Pikula, A. (2024). Understanding gender inequity in brain health outcomes: missed stroke as a case study for intersectionality. *Frontiers in Global Women's Health*, 5, 1350294.
- Boot, E., Ekker, M. S., Putaala, J., Kittner, S., De Leeuw, F. E., & Tuladhar, A. M. (2020). Ischaemic stroke in young adults: A global perspective. *Journal of Neurology, Neurosurgery & Psychiatry*, 91(4), 411-417.
- Bright, L., Wei, T. Z., Lau, S. C. L., & Baum, C. M. (2024). An Exploratory Study of Young Stroke Survivors' Lived Experiences: A Multi-Methods Study Using Developmental Theory. *OTJR: occupation, participation and health*, 44(3), 405–413. <https://doi.org/10.1177/15394492231196783>
- Cella, D., Lai, J. S., Nowinski, C. J., Victorson, D., Peterman, A., Miller, D., ... & Moy, C. (2012). Neuro-QOL: Brief measures of health-related quality of life for clinical research in neurology. *Neurology*, 78(23), 1860-1867.
- Chambers-Richards, T., Chireh, B., & D'Arcy, C. (2022). Unmet health care needs: Factors predicting satisfaction with health care services among community-dwelling Canadians living with neurological conditions. *BMC Health Services Research*, 22, 1256. <https://doi.org/10.1186/s12913-022-08611-0>
- Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. *Qualitative psychology: A practical guide to research methods*, 3, 222-248.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989(1), Article 8. Available at <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>

References

- Feigin, V. L., Stark, B. A., Johnson, C. O., Roth, G. A., Bisignano, C., Abady, G. G., ... & Hamidi, S. (2021). Global, regional, and national burden of stroke and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Neurology*, 20(10), 795-820.
- Gurková, E., Štureková, L., Mandysová, P., & Šaňák, D. (2023). Factors affecting the quality of life after ischemic stroke in young adults: a scoping review. *Health and Quality of Life Outcomes*, 21(1), 4.
- Harris, G. M., & Prvu Bettger, J. (2018). Parenting after stroke: A systematic review. *Topics in Stroke Rehabilitation*. Advance online publication. <https://doi.org/10.1080/10749357.2018.1456915>
- Harris Walker, G., Oyesanya, T. O., Hurley, A., et al. (2021). Recovery experiences of younger stroke survivors who are parents: A qualitative content analysis. *Journal of Clinical Nursing*, 30(1-2), 126–135. <https://doi.org/10.1111/jocn.15545>
- Holloway, A., Chandler, C., Aviles Reinso, L., Clarissa, C., Putri, A., Choi, H., ... & Kelly, D. M. (2022). Young adults' rehabilitation needs and experiences following stroke (YARNS): A review of digital accounts to inform the development of age-appropriate support and rehabilitation. *Journal of Advanced Nursing*, 78(3), 869-882.
- Ibrahim, S., Francis, T., Sheehan, K. A., Kokorelias, K., Stanimirovic, A., Hashmi, S., ... & Pikula, A. (2024). Exploring unmet needs and preferences of young adult stroke patients for post-stroke care through PROMs and gender differences. *Frontiers in Stroke*, 3, 1386300.
- Ide, Y., & Beddoe, L. (2023). Challenging perspectives: Reflexivity as a critical approach to qualitative social work research. *Qualitative Social Work*, 14733250231173522.
- Khan, S. U., Khan, M. Z., Khan, M. U., Khan, M. S., Mamas, M. A., Rashid, M., ... & Nasir, K. (2021). Clinical and economic burden of stroke among young, midlife, and older adults in the United States, 2002-2017. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, 5(2), 431-441., Chicago,
- Rudberg, A. S., et al. (2016). "Long-term experiences after stroke: Interviews with young adults with stroke." *Journal of Neuroscience Nursing* 48(2): 68-74.

References

- Sasikumar, S., & Pikula, A. (2018). Psychosocial needs and occupational functioning of younger adults after stroke. *EC Neurology*, 10(2), 34-47.
- Shiple, J., Luker, J., Thijs, V., & Bernhardt, J. (2018). The personal and social experiences of community-dwelling younger adults after stroke in Australia: a qualitative interview study. *BMJ open*, 8(12), e023525.
- Shiple, J., Luker, J., Thijs, V., & Bernhardt, J. (2020). How can stroke care be improved for younger service users? A qualitative study on the unmet needs of younger adults in inpatient and outpatient stroke care in Australia. *Disability and Rehabilitation*, 42(12), 1697-1704.
- Synhaeve, N. E., et al. (2019). "Psychosocial care needs in stroke survivors and caregivers: A systematic review of qualitative studies." *Disability and Rehabilitation* 41(6): 643-656.
- Tan, E., Gao, L., Collier, J. M., Ellery, F., Dewey, H. M., Bernhardt, J., ... & Moodie, M. (2022). The economic and health burden of stroke among younger adults in Australia from a societal perspective. *BMC Public Health*, 22(1), 218.
- Thompson, C., Moss, S. A., Hooper, M.-E., Kurz, E., Ladbroke, E., & Bushell, M. (2023). The experience of young stroke survivors: An interpretative phenomenological study [Preprint, Version 1]. Research Square. <https://doi.org/10.21203/rs.3.rs-2883637/v1>
- Zachariadis, M., Scott, S., & Barrett, M. (2013). Methodological implications of critical realism for mixed-methods research. *MIS quarterly*, 855-879.
- Zhang, Y., Mou, Y., Zhang, Y., Wang, J., & Kong, F. (2022). Psychological experience and social reintegration needs of young stroke patients: A systematic review and meta-aggregation of qualitative studies. *Journal of Community Health Nursing*, 39(3), 150-169.