

BARRIERS IN THE TREATMENT AND REHABILITATION PATHWAY OF STROKE PATIENTS IN AFRICAN COUNTRIES

Source basis

Evidence was synthesised from international stroke burden data and peer-reviewed literature on stroke care and rehabilitation in African countries. Every thematic finding below includes the source and page span/article number from which the fact was derived.

Introduction

Stroke is among the **leading causes of death and long-term disability worldwide**, and the global burden remains concentrated in low- and lower-middle-income countries (Feigin et al., 2025, pp. 132–144). In African countries, stroke care frequently falls **below recommended standards** because of weak stroke systems, limited stroke units, delays in presentation, transport shortages, workforce gaps and the cost of diagnostic and rehabilitation services (Urimubenshi et al., 2018, pp. 797–805). Post-stroke recovery requires **continuous, coordinated and interdisciplinary rehabilitation**, yet many patients experience limited or irregular access to rehabilitation services (Tawa et al., 2020, pp. 3–54; Aderinto et al., 2025, Article 245).



Aim

To examine the **main barriers in the treatment and rehabilitation** pathway of stroke patients in **African countries** through a review of the literature.

Environmental barriers and accessibility

Long travel distances to rehabilitation facilities reduce regular attendance (Urimubenshi & Rhoda, 2011, pp. 398–405; Tawa et al., 2020, pp. 3–54). Limited transport options and unreliable public transport make outpatient follow-up difficult, especially in rural settings (Urimubenshi & Rhoda, 2011, pp. 398–405; Mlambo & Hlongwana, 2020, Article 1475). **Walking difficulties, stairs, small indoor spaces and inaccessible toilets/pathways** create barriers to community reintegration (Urimubenshi & Rhoda, 2011, pp. 398–405). **Uneven terrain and poor walking surfaces** increase mobility limitations after stroke (Urimubenshi & Rhoda, 2011, pp. 398–405). Local clinics often have **limited rehabilitation services**, so patients depend on distant facilities or hospital-based services (Tawa et al., 2020, pp. 3–54; Urimubenshi et al., 2018, pp. 797–805).

Key source span: Urimubenshi & Rhoda, 2011, pp. 398–405; Tawa et al., 2020, pp. 3–54.



Information access and health literacy

Limited health education and low awareness of stroke symptoms contribute to delayed care-seeking and missed opportunities for early treatment (Urimubenshi et al., 2018, pp. 797–805). **Lack of information about stroke and rehabilitation** affects patient and caregiver understanding of recovery options (Tawa et al., 2020, pp. 3–54). Misconceptions about stroke may influence decisions about treatment and rehabilitation participation (Kalavina et al., 2019, pp. 112–117; Tawa et al., 2020, pp. 3–54). **Poor understanding of healthcare options** and patient rights limits navigation of available services (Urimubenshi et al., 2018, pp. 797–805). Inadequate referral to rehabilitation and poor coordination between services reduce continuity of care (Urimubenshi et al., 2018, pp. 797–805; Tawa et al., 2020, pp. 3–54).

Key source span: Urimubenshi et al., 2018, pp. 797–805; Tawa et al., 2020, pp. 3–54.

Economic barriers

Stroke can lead to **loss of employment and income for survivors and caregivers** (Kalavina et al., 2019, pp. 112–117). **Financial dependence on family members** often increases after stroke because functional limitations reduce independence (Kalavina et al., 2019, pp. 112–117). Transport costs are a repeated barrier to attending physiotherapy and follow-up appointments (Mlambo & Hlongwana, 2020, Article 1475; Tawa et al., 2020, pp. 3–54). **Costs of medication, diagnostic imaging, medical treatment and therapy limit access** to best-practice stroke care (Urimubenshi et al., 2018, pp. 797–805; Aderinto et al., 2025, Article 245). Out-of-pocket expenditure and limited health insurance coverage reduce the affordability of rehabilitation (Tawa et al., 2020, pp. 3–54).

Key source span: Kalavina et al., 2019, pp. 112–117; Tawa et al., 2020, pp. 3–54.



System and service factors

Rehabilitation services are **unevenly distributed**, with fewer local and community-based options in many settings (Tawa et al., 2020, pp. 3–54). Workforce shortages and limited specialist rehabilitation capacity reduce the intensity and continuity of therapy (Urimubenshi et al., 2018, pp. 797–805; Aderinto et al., 2025, Article 245).

Fragmented services and weak referral pathways make coordinated long-term recovery more difficult (Tawa et al., 2020, pp. 3–54).

Personal and cultural barriers

Stigma and negative attitudes toward disability may restrict participation and community reintegration after stroke (Urimubenshi & Rhoda, 2011, pp. 398–405).

Superstition and spiritual explanations of illness may shape help-seeking and perceptions of recovery (Kalavina et al., 2019, pp. 112–117; Tawa et al., 2020, pp. 3–54). **Psychological distress and depression** are reported as major challenges for stroke survivors and spouses/caregivers (Kalavina et al., 2019, pp. 112–117). Dependence on support from family and friends is central to daily functioning but may also increase caregiver burden (Kalavina et al., 2019, pp. 112–117).

Key source span: Kalavina et al., 2019, pp. 112–117; Urimubenshi & Rhoda, 2011, pp. 398–405.

Discussion

The literature shows that the rehabilitation pathway after stroke in African countries is **shaped by a combination of individual, social, environmental and health-system barriers** (Tawa et al., 2020, pp. 3–54; Aderinto et al., 2025, Article 245). Recovery is therefore determined not only by the **patient's motivation or cooperation**, but also by access to **transport, affordability, family support, referral quality, workforce availability, and the physical environment** (Urimubenshi et al., 2018, pp. 797–805; Urimubenshi & Rhoda, 2011, pp. 398–405).

When these barriers accumulate, therapy may become less frequent, delayed or interrupted; this can reduce functional progress and make return to everyday activities and community participation more difficult (Mlambo & Hlongwana, 2020, Article 1475; Kalavina et al., 2019, pp. 112–117).



Conclusion

Barriers to post-stroke rehabilitation in Africa are not only patient-related; they reflect **wider limitations in health-system organisation, service availability, financing, transport and community accessibility** (Urimubenshi et al., 2018, pp. 797–805; Tawa et al., 2020, pp. 3–54). Improving outcomes requires a comprehensive approach: **better referral and coordination, affordable services, stronger community-based rehabilitation, improved transport/accessibility, family support and investment in rehabilitation workforce capacity** (Tawa et al., 2020, pp. 3–54; Aderinto et al., 2025, Article 245).

Evidence map

- Global burden and LMIC concentration: Feigin et al., 2025, pp. 132–144
- Health-system barriers, transport, imaging costs, workforce and stroke units: Urimubenshi et al., 2018, pp. 797–805
- Rehabilitation service availability, fragmentation, workforce and community-based rehabilitation: Tawa et al., 2020, pp. 3–54
- Environmental access, pathways, toilets, stigma and social support: Urimubenshi & Rhoda, 2011, pp. 398–405
- Economic/social consequences and caregiver experience: Kalavina et al., 2019, pp. 112–117
- Financial, geographical and implementation barriers: Aderinto et al., 2025, Article 245; Mlambo & Hlongwana, 2020, Article 1475.

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